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**SILVER PUNCH-MARKED COINS FROM BAHAL  
(BOMBAY PRESIDENCY)**

**BY PARMESHWARI LAL GUPTA, ASST. EDITOR,**



## Introduction

It is customary to talk about Indian culture but so far as its material aspect is concerned we do not precisely know what it was. Our knowledge of the material culture of our ancient past is derived, to a great extent, from literary sources which, however, are too sketchy and in many cases we do not know as to what refers to what. The only reliable source, therefore, is the actual specimens that are found in the course of archaeological excavations at ancient sites. But there is hardly any ancient site worth the name, with the solitary exception of that at Taxila, which has been subjected to thorough and yet scientific excavation. In the circumstances, we have to depend solely on the plastic representations of our ancient cultural equipment. In this connection it would be no exaggeration to state that there is hardly any other monument in the country, save the wall paintings at Ajanta, like the great *stūpa* with its ornamental gateways at Sanchi, which depicts such an immense wealth of objects of daily use. These magnificent *toranas* are profusely sculptured with many scenes from the past lives of 'the Enlightened One' and in doing so the royal sculptors of the Satavahanas have portrayed the contemporary life in these dainty carvings. The reliefs thus constitute an illustrative documentary on the contemporary life and are therefore helpful in building up a vision of our vanished past in all its glory.<sup>1</sup>

In the following pages, therefore, an attempt is made to study the entire wealth of the cultural equipment that is depicted in the reliefs, to compare the same with the actual specimens that have been found in the excavations of ancient sites, to note the plastic parallels, to substantiate it with the help of the accounts of foreigners and to corroborate the same by literary descriptions as far as possible.

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(1) Right from the crude carvings and paintings of the Palaeolithic period upto the sophisticated art of our own days, art, throughout the history of the world has been reflecting the contemporary social life. This has been ably discussed by Arnold Hauser in his *Social History of Art*, 2 vols. (London, 1951).

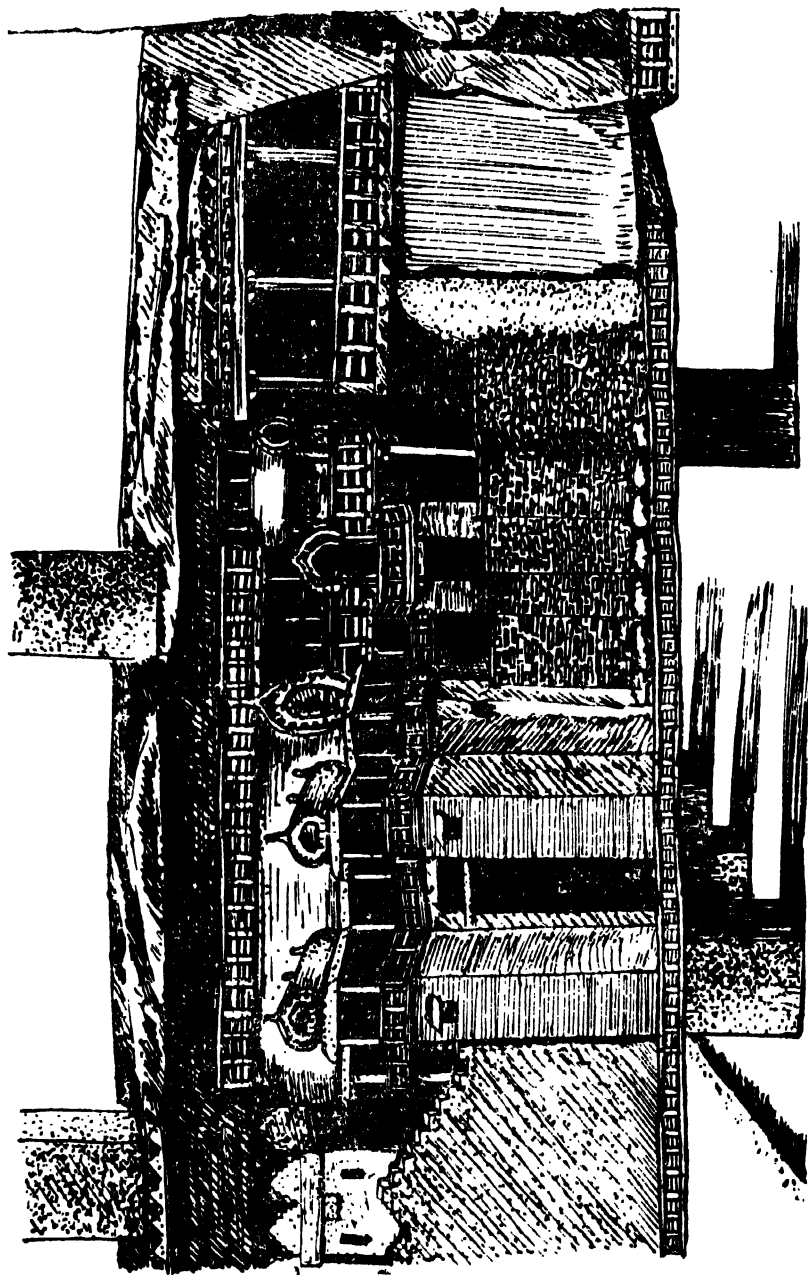
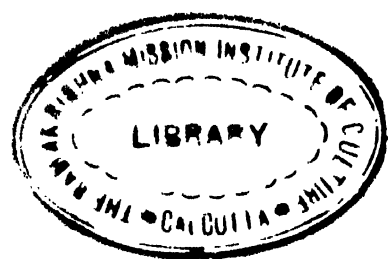


Fig. 1







RM 16/11/1945	
Acc. No. 108355	
Class No. 1	
Date	21.8.55
St. Card	21
BAHAL	21
Cat.	21
Checked	21

## SILVER PUNCH-MARKED COINS FROM (BOMBAY PRESIDENCY).

BY PARMESHWARI LAL GUPTA, ASST. EDITOR, *Asiatic Researches*.

### INTRODUCTION.

Mr. S. N. Chakravarti has published a paper on a hoard of 690 silver punch-marked coins<sup>1</sup>, which was found in 1945 at the village Bahal in Chalisgaon Taluka of the East Khandesh district in Bombay Presidency.<sup>2</sup> This is the largest hoard of the punch-marked coins ever discovered in that province.<sup>3</sup>

The coins are of 'various shapes—square, rectangular, polygonal, round and oval' and have 'the group of five symbols on the obverse—four constant and the fifth varying'. Of the four constant symbols, two,—sun and the six-armed symbol—, occur on every coin. Mr. Chakravarti has grouped them on the basis of their fabric and size in three groups A, B and C. The group A comprises of 106 coins, which are thin and large, while the group C has 352 coins which are thick and small. The group B with 232 coins, forms a connecting link between A and C.<sup>4</sup> The coins of each group have been divided into different classes and sub-classes with reference to symbols on the obverse. Each coin class bears on the obverse a group of four constant symbols and the sub-class is formed by the fifth symbol. Out of the entire hoard only 216 coins,—84 in group A, 100 in group B and 30 in group C—, are classified in the said paper.<sup>5</sup>

### CERTAIN NEW THEORIES.

Mr. Chakravarti has suggested in his paper that these groups of the punch-marked coins, based on fabric and size represent denominations;<sup>6</sup> this view can hardly be accepted. Fortunately enough, he has recorded the weight of 12 coins of the hoard, four from each group in table 4 of his paper. The weight of these coins varies between 46½ to 51 grains.

1. This includes five fragmentary pieces. Of them 3 are halves cut from round coins, and the remaining two fragments fit nicely to form a complete square coin, which has been broken by design or accident into two pieces. *Asiatic Researches*, Vol. VIII, p. 68.

2. *J. B. B. R. A. S.* Vol XX (n. s) pp. 88-87 : A new find of silver punch-marked coins from the Bombay Presidency.

3. *J. N. S. I.* Vol V p. 169.

4. *Op. Cit.* p. 83.

5. *Ibid* p. 85-87.

6. *Op. Cit.* p. 84.

We wonder how one could suggest in the light of such a small and negligible difference that they represent various denominations. We do not know any instance in the history of the currency of the world, where coins were issued, even if they were tokens, of various denominations, with so little a difference of weight. Moreover the weight of the coins of various denominations varies in some proportion in accordance with the value of the coins. Here the difference in the weight of the coins may easily be attributed to the wearage in the use. In a number of hoards the coins having the same symbol group have been found varying in weight according to the condition of the coins. For example, the coins of class II, group IX var. b of Patraha hoard vary in weight between 46.6 to 53 grains<sup>1</sup> having the difference of 5.4 grains, which is much more than the difference shown above. Can this difference be attributed to a difference in denomination? Certainly not. The coins which were more in currency look much worn and are lesser in weight than those which look less worn or look like fresh. The coins of the present hoard are of one denomination, which is of 32 *rattis* standard.

Mr. Chakravarti, presenting the above utterly untenable theory, refutes the idea that fabric and size had any relation with the periods of their currency<sup>2</sup>. We do not know if any scholars have so far accepted the fabric and size as the scientific basis of the classification of the coins; nevertheless they did suggest them as broad basis of distinction between the two periods. Cunningham says, 'The earlier coins are generally thin and broad and of irregular shape. Some are oblong and some are nearly round<sup>3</sup>. Mr. Durga Prasad says, 'The coins of earlier period are broader and thinner, of irregular shape with round corners, of a different standard of weight and impressed with a group of 4 crudely designed symbols<sup>4</sup>. But we are not here concerned with these suggestions as they refer to the coins of four symbols. The coins of five symbols, according to Durga Prasad, are of comparatively later period (middle and later or Mauryan). Regarding them he says, 'They are more geometrical in shape, being circular, elliptical, oblong and square, with clear corners, clipped or unclipped, thicker and smaller<sup>5</sup>. Mr. Walsh says that the punch-marked coins of the small square thick type are of a later period than the larger thin type.

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1. *M.A. S.I.* No. 62 : *A hoard of silver punch-marked coins from Purnea.* p. 41-42.

2. *Op. cit.* p. 84.

3. *C. C. A. I.* p. 43.

4. *J. A. S. B. Num. Supl.* No. XLVII : *Observations on different types of silver Punch-marked coins, their period and locale* ; p. 51.

5. *Ibid.* p. 51.

6. *M. A. S. I.* No. 59 : *Punch-marked coins from Taxila*, p. 81.

In 1924 a hoard of 1171 silver Punch-marked coins was found in the Bhir mound at Taxila. Of them 33 are long bar coins, 79 are minute coins and the rest are thin and large and bear on the obverse five symbols, of which two are always the sun and the six-armed symbol and are square, rectangular, polygonal, round and oval in shape<sup>1</sup>. They correspond with the coins of the groups A and B of the present find. Along with that hoard were found two gold coins of Alexander the Great and one of Philip Aredaeus. These coins fix the date of the deposit at about 317 B.C. and it implies that the coins of the varieties, fabric, size and shape of the coins of that hoard were current at that period. It can safely be said with the aid of that hoard, that the coins of the group A and B of the present hoard were in currency as early as 317 B.C.

Another hoard of 157 silver punch-marked coins was found from the same site in 1912, which were small, square and thick<sup>2</sup>. They correspond to the coins of group C of the present hoard. Along with the coins of that hoard was found a gold coin of Diodotus, which fixes the date of the deposit as early as 248 B.C. and the coins of the hoard may be taken to be in currency in that period.

But Mr. Chakravarti objects to these conclusions and says that 'the absence of the small thick coins in Bhir mound larger find would not imply that they were not in circulation at the time of the deposit of the find<sup>3</sup>. Further he says that it would not be correct to account for the absence of the thin large coins in Bhir mound smaller find by saying that they were out of circulation and were no longer issued then'<sup>4</sup>. Apparently the contention looks sound but in view of the evidence available, it is not tenable.

There is clear evidence to show that the small thick coins were not in circulation, when the larger Bhir mound hoard was deposited near about 317 B. C. It is admitted that the hoard was deposited at such a date which may be called as pre-Mauryan and that the smaller hoard at such a period which was Mauryan. There is also the undenyng fact that most of the coins of the smaller hoard have 'crescent on the hill' mark as one of their obverse symbols; and that this symbol was the imperial mark of the Mauryan kings has been established beyond doubt on substantial grounds by late Dr. K. P. Jayaswal<sup>5</sup>. The coins having 'crescent on the hill' symbol on the obverse are, as such, undoubtedly the coins of the Mauryan

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1. *Ibid* p. 1.

2. *Ibid* p. 31.

3. *Op. cit.* p. 84.

4. *Ibid.* p. 84.

5. *J. R. A. S.* (July 1936), p. 489

period. Then how could they be found in a hoard deposited earlier ?

It is true that the absence of thin large coins in the smaller find of the Bhir Mound cannot be ascribed to their being out of circulation at the time of deposit of the hoard, as the present hoard and a number of other hoards contain both the varieties of the coins and show that they were simultaneously in circulation. And this fact has never been denied by Mr. Walsh or any other scholar. But at the same time the absence of the earlier coins in the hoard of later coins, when both were simultaneously in currency, is not improbable, though it looks somewhat very strange. In the excavations at Rairh in Jaipur State in 1938-39, three hoards of punch-marked coins—1933, 535 and 132 in number—were found within the area of 30 feet and at 17.34, 17.14 and 16.35 feet, respectively, above the datum line. All the three hoards were deposited in the Mauryan period and probably at very short intervals ; but while the first two hoards consist of both the varieties of the coins, the third hoard has only the coins with 'crescent on the hill' symbol, thick and small,<sup>1</sup> which are undoubtedly later.

With all these facts, there is hardly any doubt that the fabric, size and shape have something to do with the period of currency of the coins, though upto now no systematic approach has been made in this direction.

Mr. Chakravarti makes another suggestion. It concerns with the obverse symbols on the punch-marked coins. Of the four constant symbols, he thinks, the common symbols on all the coins probably have religious significance; of the other two symbols, one may be of locality, where it was struck and the other of the mint-master. Fifth may be of the authorities issuing the coinage.<sup>2</sup> In this respect, Mr. Walsh's suggestion is that, 'One mark may represent the state, one the king or local government, one the place where the coin was struck and perhaps one religious mark, recognizing the presiding deity ; also the master of mint may have had his mark, which would fix his responsibility for the coin, and the additional varying marks may have been those of the *sanghas*, village communities or *janapadas* or *nigamas* in which the coin was current.'<sup>3</sup> Mr. Durga Prasad, keeping silence about the two common or constant symbols, expresses his views that the variation of the third symbol is for the king, the remaining two for the change of years and places most probably.<sup>4</sup> Likewise other scholars may have their own views about the symbols on the obverse of

1. K. N. Puri; *Excavations at Rairh* P. 12 ; pl. XXVII—XXIX

2. *Op. Cit.* p 84.

3. *Op. cit.* p. 5.

4. *Op. cit.* p. 80.

the coins, but it is clear that all these suggestions are mere conjectures and have nothing substantial in their support. So far no genuine effort has been made to interpret the significance of the symbols on the coins. No useful purpose could be served by simply repeating the oft quoted passage from the *visuddhi-magga*, unless a proper, systematic and scientific classification of the symbols and symbol groups is presented after the critical study of the maximum number of hoards available.

### STUDY OF THE COINS

Now let us come to the study of the coins of the present hoard. Out of 690 coins only 218 coins are classified by Mr. Chakravarti in his paper. He has given no reason for excluding more than two-third (472 coins) from the classification. In the absence of their classification, we are unable to know if they had any interesting coins<sup>1</sup>. To me it appears that all those coins were probably so worn that either they might have become plain or that they had very indistinct traces of the marks or that only one or two marks could be identified on them<sup>2</sup>. This might have led Mr. Chakravarti to exclude them from classification. Nevertheless, if it was so, he should have mentioned these facts. If our conjecture is correct, we would like to point out that while 84 out of 106 coins of group A and 100 coins out of 232 of group B are classified, only 30 coins out of 352 coins of group C have found place in the classification. It shows that most of the coins of thick and small type were badly worn. This case is not peculiar to the present hoard; it holds good of some other hoard as well. In a hoard of 332 coins from Lalganj Tahsil (Azamgarh, U. P.), which is in my collection, 71 coins are so worn that either they have become plain or only indistinct traces of marks are visible on them; on 30 coins one mark and that mostly of sun could be identified; on 48 coins two marks could be identified. And mostly all these coins are of small and thick variety, while none of the coins of thin and larger variety in the hoard has less than three identifiable marks. In another hoard from U. P. (Treasure trove no 28 of 1916) now deposited in Lucknow Museum, out of 41 later coins only 13 are sufficiently clear for all the five marks to be deciphered<sup>3</sup>. These facts shed an interesting light on the metallurgy of the coins and lead us to conclude that the metal of the earlier—thin and larger—coins was hard and could sustain the long currency, while the metal of the later thick and small coins was soft and could

1. Recently Prof. D.D. Kosambi has published 4 interesting coins from these unclassified coins, *Antc* Vol. VII, p. 64-65.

2. Since then, Prof. D. D. Kosambi has examined and reclassified the hoard; he found only 78 coins as too battered for proper classification. *Ibid* 68.

3. *J. N. S. I.*, Vol III, p. 2

not bear a long circulation. Chemical analysis of the metal of the coins should be made to verify this conclusion.

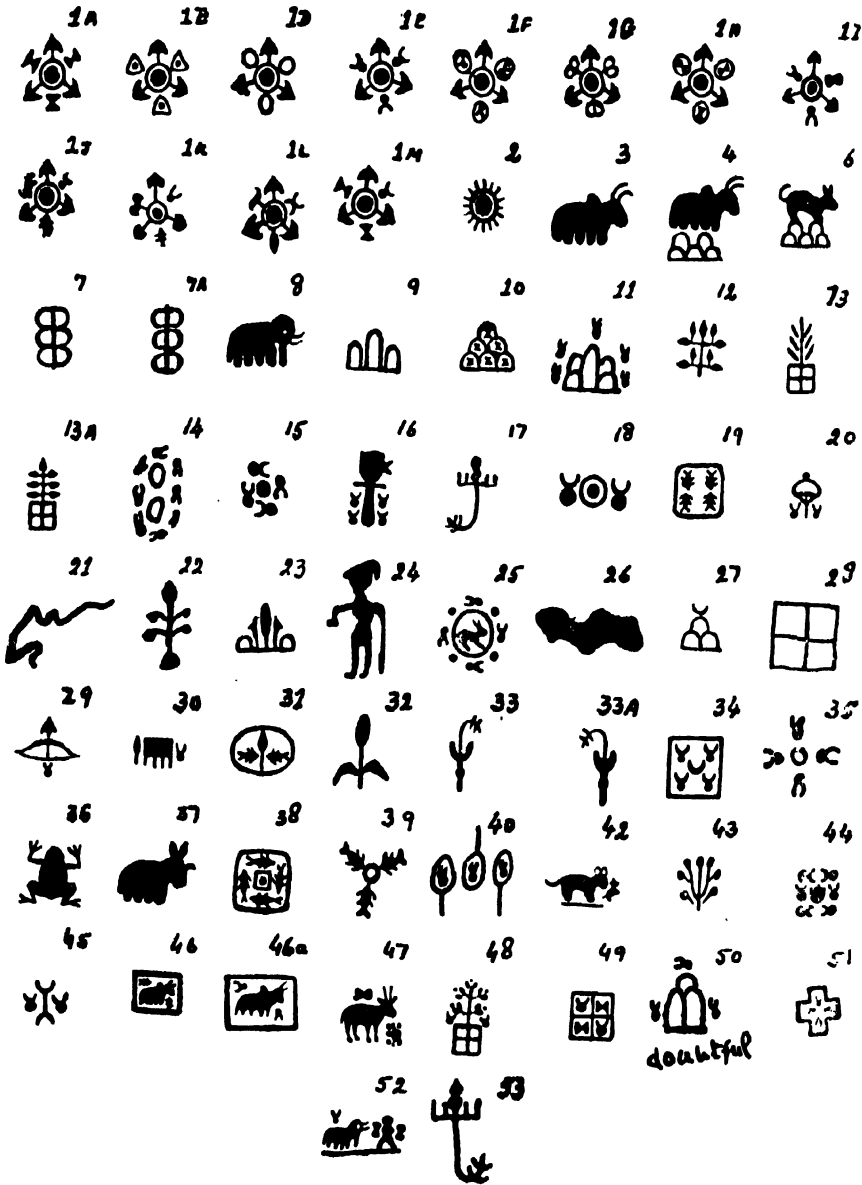
#### IDENTIFICATION OF SYMBOLS.

As regards the identification of the obverse symbols we wish to point out that in most of the cases only a portion of any mark appears on the punch-marked coins and in such cases, when the complete mark does not appear on any of the coins, it has to be determined from the different portions of the mark found on separate coins. But even then occasions arise, where the complete mark could not be determined with certainty on the coins of the same hoard. In such cases comparative study of other hoards often proves useful. But it seems to me that in the study of the present hoard, Mr. Chakravarti relied entirely on the coins of this hoard alone and sometimes on single coins only. His paper shows that he could not identify several marks completely or accurately. Sometimes he has misidentified the symbols. Symbols 10, 11, 12, 17, 19, 20, 22, 25, 30, 37, 40, 42, and 46 are inaccurately or incompletely identified by Mr. Chakravarti on the present coins.<sup>1</sup> The accurate symbols on these coins are illustrated on **Pl. IX** and the references to the similar symbols in various other hoards are given in Appendix B accompanying this paper. In the case of symbol No. 37, Mr. Chakravarti has confused two symbols as one. One is symbol 42 as corrected on our plate and the other consists of the symbols, which have been replaced for the present symbol on the plate.

Often it is not easy to distinguish between the two varieties of a symbol or between two different symbols, unless one is very conversant with the distinctions of the symbols. The confusion mostly happens in the case of the six-armed symbols. In such cases, the fact is often ignored by the scholars, that every symbol has its own group of symbols, i. e. particular symbols are to be found only with a particular type of six-armed symbol, or a particular six-armed symbol is found only with a group of particular symbols. In his study Mr. Chakravarti could not distinguish five undescribed varieties of the six-armed symbol from those he has described and the other variety of the symbols 7 and 46. So the coins having these symbols have been attributed by him to one or the other varieties of these symbols. Such seven undescribed symbols are illustrated on **Pl. IX** as 1i, 1j, 1k, 1l, 1m, 7a and 46a and the references to these symbols in other hoards are given in the Appendix B.

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1. Prof. D.D. Kosambi has noticed inaccuracies in symbols 10, 12, 30 and 37. *Ante* Vol. VIII, p. 64.



SYMBOLS ON BAHAL PUNCH-MARKED COINS





In his table 3 Mr. Chakravarti has described a symbol 13a on a coin of class VIII in group C, but it is not illustrated on plate I of his paper. We believe the symbol is the same as we have illustrated on Pl. IX as 13a and described in the Appendix B.

Of the illustrated symbols on plate I of Mr. Chakravarti's paper, symbol 50 is a doubtful symbol. It is probably an incomplete or a misidentified symbol. (See Appendix A, table 3, Var. 44).

Symbols 1c, 5 and 41 should be omitted for the following reasons :—

1c is the same symbol as symbol 1a. It is rather strange how one could imagine of an eight-armed symbol, when the symbol of six arms only is known on the punch-marked coins. The coins to which it is attributed are of the same variety, to which symbol 1a is ascribed.

Symbol 5 is illustrated on plate I of Mr. Chakravarti's paper, but it is not attributed by him to any variety of the coins in the present hoard. It is the same symbol as symbol 42 as corrected on Pl. IX.

Symbol 41 is the lower part of the well-known symbol having bull at the top, which it seems is not punched on the coin. Other symbols on the coin help in correctly identifying the mark.

Of the remaining symbols 21, 32 and 35 are new symbols, if they are properly identified. Without the examination of the coins nothing more definite could be said about these symbols. As regards symbol 35, I have some doubt. It may be part of the well-known symbol, which is the same as Pl. IX, 51.

#### CLASSIFICATION OF THE COINS.

Apart from the inaccurate or wrong identification of symbols, Mr. Chakravarti's classification of coins, as far as the division of classes and sub-classes is concerned, is quite satisfactory and needs no comment. But as his classification is primarily based on groups, grouped on the basis of fabric and size, a number of coins, having the same symbol-group on the obverse, are grouped in more than one group, which is confusing. The coins having the same symbol groups on the obverse are of one and the same variety in spite of the difference in fabric and size.

Here I have tabulated the varieties in Appendix A under four tables. In Table 1, those varieties of coins are classified which are properly identified with their obverse marks and are

well-known from other hoards. In Table 2 are grouped those varieties which are well-known from other hoards, but Mr. Chakravarti has erred in identifying some of the symbols. These varieties have some other symbols than those as identified on them. In Table 3 are given those varieties, which may be known varieties, but the identification of their symbols is so inaccurate that they could not be properly classified unless they are re-examined. Table 4 contains those varieties, which are new, i. e. are not known from any other hoards, so far published. But their classification as new only holds good, if the symbols are correctly identified.

#### REVERSE SYMBOLS

Mr. Chakravarti has not attached any importance to the symbols on the reverse. He has made no reference to them in the paper, but has contented himself with a general remark of one sentence only. But for this, he is not to be blamed alone. The reverse symbols did not have the due share of attention from any of the scholars interested in this topic of the Indian numismatics. No attempt has yet been made for their proper classification, except recognizing the fact that they have some relation, whatever that may be, with the symbols on the obverse.

#### CONCLUSION

The present study is presented without a study of the original coins or their photographs. It is based merely on a critical examination of the facts presented by Mr. Chakravarti in the light of the knowledge attained from other sources. But I hope that my observations and conclusions are to a great extent accurate. In the interest of the furtherance of the study of the subject, the coins should be re-examined in the light suggested herein, and every coin of the hoard be classified and the weight, obverse and reverse symbols should be properly and accurately recorded; they should be published in a monograph with the illustrations of the coins. May I hope that the Bombay Branch of the Royal Asiatic Society, with which the hoard is deposited, will take early steps to publish such an exhaustive study?

# APPENDIX A

## CLASSIFICATION OF THE PUNCH-MARKED COINS FROM BAHAL.

TABLE I.

### *Properly Classified Varieties.*

NOTE:—The symbol number printed in bold indicate that it was inaccurately or partly identified by Mr. Chakravarti on the coins. The correct symbol is as illustrated on Pl. IX accompanying this paper and not as illustrated by him on the plate accompanying his paper.

Serial No.	Class			Symbols	References from other hoards			
	Group A	Group B	Group C		B.M.C.	D. P.	Walsh	Bhattacharya
1	I, 1	I, 1	IX <sup>1</sup>	1f, 2, 6, 3, 7a,	VI, IVa	29A13	A2	iii, ivj
2	I, 2	I, 2	...	1f, 2, 6, 3, 8	VI, IIIc	29A2	A1	iii, ivb
3	I, 3	I, 3	...	1f, 2, 6, 3, 12	...	29A6	A3	iii, iva
4	I, 4	I, 5	...	1f, 2, 6, 3, 14	..	29A 10	A13	...
5	I, 5	...	...	1f, 2, 6, 3, 15	VI, IIle	29A3	A8	iii, ivk
6	I, 6	I, 6	...	1f, 2, 6, 3, 18	VI, IIIId	29A12	A7	iii, ivd
7	I, 7	I, 7	...	1f, 2, 6, 3, <b>20</b>	...	...	A6	iii, ivl
8	I, 8	...	...	1f, 2, 6, 3, 26	VI, IIIf	29A4	A5	iii, ivf
9	I, 9	I, 8	...	1f, 2, 6, 3, <b>19</b>	...	29A5	A4	iii, ivh
10	I, 11	...	...	1f, 2, 6, 3, 34	...	...	...	iii, ivg
11	...	I, 4	...	1f, 2, 6, 3, <b>22</b>	...	29A7	A9	iii, ivb
12	IV	...	...	1f, 2, 6, 36, 7a <sup>2</sup>	VI, IVb	29B3	A19	iii, va
13	...	VII, 2	...	1f, 2, 6, <b>25</b> , 7a <sup>2</sup>	VI, IVf	29B2	A28	iii, via
14	VII	...	...	1d, 2, 6, <b>17</b> , 8 <sup>3</sup>	...	...	...	...
15	II, 1	II, 2	...	1f, 2, 4, 16, 8	VI, IIe	25A1	C1	iii, iib
16	II, 3	...	...	1f, 2, 4, 16, <b>20</b>	...	...	C4	...
17	II, 5	...	...	1f, 2, 4, 16, 33a	...	...	C5	...
18	...	II, 3	...	1f, 2, 4, 16, 18	...	...	C3	...
19	III, 1	IV	...	1d, 2, 11, 16, 8	VI, Ih	2A1	J1	...
20	III, 2	...	...	1d, 2, 11, 16, 33	VI, Ij	...	J2	iii, iig
21	V	...	...	1b, 2, <b>37</b> , 38, 18	VI, Id	6B2	M2	iii, ic
22	V, 12	...	...	1e, 2, 27, 7, 24	II, IIIf	...	...	...
23	...	V, 12	...	1e, 2, 27, 7, 47	II, IVb	...	...	ii, ivj
24	...	...	III	1g, 2, 44, <b>19</b> , 43	II, Vc	24A1	...	ii, xh
25	...	...	I	1a, 2, 28, 7, 29	II, IXa	31A1	...	ii, vj
26	...	...	X	1h, 2, 48, 7, 49	II, IVq	30A1	...	ii, v, i

1. Coin of Var. 1 grouped as IX in class C is assigned with symbol 1a by Mr. Chakravarti, but no coin with this symbol is known any where. It seems to be a wrong identification for 1f. But it is more likely that it may not belong to this class at all, as its fabric suggests.

2. These coins are assigned with mark 7 but actually they have mark 7a, a variety of the same mark.

3. See Puri's *Excavations at Rairh*, pl. XXIV coin 41; pl. XXXIV, Var 8.

TABLE 2.

*Known varieties, but attributed with wrong symbols.*

Following varieties have been attributed by Mr. Chakravarti as having symbols, other than those known on them from the coins of other hoards. Such wrongly attributed marks are printed in bold in the column of the symbols. Some of the symbols on these coins are inaccurately or partly identified. They are indicated here with italics. Correct symbols are illustrated on **Pl. IX**.

St. No.	Class			Symbols		References				Remarks
	Group A	Group B	Group C	As assigned	Correct	BMC.	D. P.	WALSH	Bhatta- charya	
27	VIII	...	...	1f,2,41,16,3	1f,2,4,16,8	VI,IIe	25A1	C1	II,IIb	Same as 15
28	VI	...	...	1d,2,39,40,8	1h,2,39,40,8	...	...	Q4b Coins 778, 906A		
29	IA	III	...	1e,2,9,42,8	1i,2,9,42,8	II,VIII	39B1	B(e)1	II,XIh	Same as 30
30	...	III2	VII2	1e,2,9,42,23	1i,2,9,41,23	II,VIIj	39B2	...	II,XIb	
31	...	...	VII1	1e,2,9,42,7	1i,2,9,42,7	II,VIIb	39B6	...	II,XIc	
22	...	IX2	...	1e,2,9,42,13	1i,2,9,42,13	II,VIb	39B3	B(e)2	II,XIf	
33	...	...	IV2	1e,2,9,37,23	1i,2,9,42,7	II,VIIj	36K2	...	II,XIb	
34	...	...	IV1	1e,2,27,37,23	1e,2,27,42,23	...	40H1	...	II,XIa	
35	...	...	II2	1g,2,27,19,43	1e,2,27,19,43	II,Vb	40C1	...	II,Xb	
36	...	VIII	...	1e,2,28,7, 9	1a,2,28,7,29	II,IXi	31A1	...	II,Vj	
37	...	...	VI1	1e,2,48,7,47	1j,2,46,7,475	II,IVo	32A8	...		
38	...	...	V	1,2,45,46,16	1k,45,46,15	II,IXb	...	...	II,VId	
39	...	XI	III	1,2,30,31,13	1i,2,30,31,1,	II,Xb	22A2	...	II,XIf	Same as 25
40	...	...	VIII	1a,2,10,13a	1m,2,10,13a	...	36A2	...	II,VIIb	
				46	46					

TABLE 3

*Varieties with doubtful assignment of symbols.*

Serial No.	Class	Symbols	Remarks.
41	A.I. 10	1f, 2,6,3,35	The coin belongs to the class represented by series 1-11 in this hoard. The fifth mark as deciphered by Mr. Chakravarti is not seen on any of the coins of this series or any other series in any known hoard. This mark surrounded by a hollow cross (fig. 51) forms a fifth mark on a number of coins of this series. It is very likely that the coin is of the same variety as is D.P. 29 A 11/1; Bhattacharya iii. iiii; Puri Pl. XXII coin 38, and here the mark is partly identified. But if the mark is correctly identified, then the coin represents a new variety.
42	B.VI. 1	1e, 2,27,7,8	The coin belongs to the well known series represented in the present hoard with var. 22 and 23, but the fifth mark i.e. symbol 8 (elephant) is not known in the series, except in the sub-class having symbol 42 as the fourth mark (D. P.: 40H3). On the coins having symbol 7 as the fourth mark, the elephant is seen as the part of a complex symbol, illustrated here on plate IX (fig. 52). It is very likely that the coin is of the same variety as is Bhattacharya i. iv.h and the mark is identified in its incomplete form. But if the mark is correctly identified as symbol 8, then the coin represents a new variety.
43	B.IX.1	1e,2,13,42,7	Of the five marks, the symbol 42 is identified on the coin incomplete. It should be as shown on the accompanying plate. Of the remaining marks symbol 13 and 7 are the fifth marks and they never occur on one and the same coin. So the identification of atleast one mark is incorrect. On the present coin I think some other mark has been mistaken as

Serial No.	Class	Symbols	Remarks
44	C. V	1d, 2,6,8,26	<p>symbol 7. The coin may be of the variety 31 of the present hoard or 40E7 of D. P. If the coin belongs to the former class then the mark identified as symbol 7 is symbol 9 and symbol 1e is li. But if it is of the later variety then the mark identified as symbol 7 is symbol 27 and mark 1e is correct.</p> <p>Symbols 8 and 26 are the fifth marks. They cannot occur on one and the same coin. So one of them is erred for some fourth mark. Here we think mark 8 has been mistaken for mark 3. Hinder portion of both the marks are alike. The coin is most likely of variety 8 of the present hoard.</p>
45	C.VIII	1f, 2,6,7,12	<p>Symbol 7 and 12 are the fifth marks. They cannot occur on one and the same coin. So one of them is mistaken for some fourth mark, but which one is wrongly identified cannot be suggested off hand in the present case.</p>
46	C. XI	1e, 2,50,x,15	<p>Only four marks of the coins are identified. Mark 50 as identified by Mr. Chakravarti is not seen on any coin in any hoard. Probably it is an incomplete or misidentified symbol. If the identification of 1e is correct, then symbol 50 is misidentified for symbol 27 and the coin belongs to 40A1 or 40G7 of D. P. the two varieties of the two sub-classes having different fourth symbols. It is also probable that the symbol 50 might have been misidentified for symbol 9. In that case symbol 1e will be li.</p>

TABLE 4.

*New Varieties of the coins, not known from any other source.*

Serial No	Class	Symbols	Remarks.
47	A.I.12	1d,2,6,3,33a	The coin belongs to a well known series, which is represented in the hoards with series 1-11, but it has a different first and new fifth mark. Coins having 1f and 33 as first and fifth mark are known from Walsh (A12a), but with 1d and 33a is not known so far. Coins with 1d is known in this series (Walsh A31; Puri: Pl. XXXIX, coin 8) but they have symbol 17 and elephant (symbol 8) as fourth and fifth marks. Probably this coin is another variety of the same with another variety of the fig. 17 as fig. 53. But if 33a is correctly identified, even then it is a new variety.
48	A.II.2	1f,2,4,16,14	The coin belongs to the class represented by series 15-18 in this hoard. Mark 14 is so far seen only on var. 4 of this hoard which is same as 29A10 of D.P. and A10 of Walsh. It is seen for the first time on the coins of this class. So the coin represents an entirely new variety.
49	A.II.4 B.II.4	1f,2,4,16,21	The coin belongs to above class with a new fifth mark 21, which is not known on any coin of this or any other class of any hoard. If the mark is correctly identified, then the variety is new.
50	B.II.1	1f,2,4,16,7	The coin belongs to above class and the fifth mark 7 is a well known symbol, which is seen for the first time in this series. It is attributed to one coin. If the identification is correct, it adds a new variety to the series.
51	B.X	1f,2,32,3,8	Mark 32 on the coin is entirely new and represents the class mark, as the other two marks, besides the two constant marks, are the well known fourth and fifth marks. If the identification is correct or the symbol is complete, then it suggests altogether a new class of coins which are hitherto unknown.



## APPENDIX B.

### OBVERSE MARKS ON THE PUNCH-MARKED COINS FROM BAHAL.

Italicised figures in column 1 show the symbols, which were inaccurately or partly identified on the coins, by Mr. Chakravarti. The Bold figures indicate the symbols that were not identified and described by him. The symbol marked with asterisk has doubtful identification. In the last are those marks, which are referred as probable symbols on the coins, noted against them.

Symbols	Seen on varieties	References			Remarks
		D. P.	Walsh	Bhatt	
1a	25	21		2d	Was also attributed to Var. 1 (group C class IX) and 40. For Var. 1 see App. A, Tab. B. It has 1f. Var. 40 has undescribed symbol 1m.
1b	21	4		2a1	
1c	...	...	...	...	Omitted Same as 1a.
1d	14,19,20,41,46	2	1f	2b	Was also attributed to Var. 28, which has sym. 1h.
1e	22,23,25,37,44,51	28		2	Was also attributed to var. 29-34 and 43, which have undescribed sym. 1i. Var. 35 was attributed with var. 1g.
1f	1-13,15-18,27,42,45	20	1a	2a	
1g	24	19		2c	Was also attributed to var. 35, which has sym. 1e.
1h	26,28	11	1c	2i	Var. 28 was attributed with symbol 1d.
1i	29-34		1u	2o	This mark is often mistaken as 1e. For detailed discussion see <i>J.N.S.I.</i> Vol. IV p. 109, § 35.

Symbols	Seen on varieties	References			Remarks
		D. P.	Walsh	Bhatta	
<b>1j</b>	37	22		2f1	Var. 37 was wrongly attributed with sym. 1e
<b>1k</b>	38			2k	Proper variety was not identified
<b>1l</b>	39	17		2q	do
<b>1m</b>	40	26		2m	Var. 40 was wrongly attributed with sym. 1a.
<b>2</b>	1-51	1	2	1	
<b>3</b>	1-11,19,45-47	32	3	36	
<b>4</b>	15-18,48-50	32e	3b	12	
<b>5</b>	...				Omitted ; seen on no coin.
<b>6</b>	1-14,41,42,45 46	33	4	11	
<b>7</b>	22,23,25,26, 32,36,51	111a		86	
<b>7a</b>	1,12,13	111	6	87	Was mistaken on the var. as sym. 7
<b>8</b>	2,14,15,19,27 28,41,47,51	29	7	42	
<b>9</b>	29-33	44	9a	89	
<b>10</b>	40	40		7	
<b>11</b>	19,20	39	11a	9	
<b>12</b>	3,45	68	13	23	
<b>13</b>	31,39,43	75a	15a	27	
<b>13a</b>	40	72a		14	Identified other than symbol 13 on class VIII group C but was not illustrated in Mr. Chakravarti's plate.
<b>14</b>	4,48	109	19e		
<b>15</b>	5,38,44	101	20a	67	
<b>16</b>	15-20,27,48,50	99	21	66	
<b>17</b>	14	...	24a	62	This symbol is described by Walsh and Bhattacharya as 22a and 106 respectively, but both have given incomplete mark. It is seen in its complete form on coin 41, XXIV of Puri's <i>Excavations at Rairh</i> .

Symbol	Seen on varieties	References			Remarks
		D. P.	Walsh.	Bhatta	
18	6,18,21	92			
19	9,24,25	59	8a	124	
20	7,16		41	74	
21	49				New ; not seen elsewhere.
22	12		18a	18	
23	30,33,34	86		88	
24	22				
25	13		4g	80	
26	8,44	124	42a	110	
27	2,23,34,25,42	43		3	
28	25,36	115		90	
29	25,36	113a		109	
30	39			64	
31	39	57		130	
32	47				New.
33	20		43a	21	
33a	17,47			20	
34	10			78	
35	41				New.
36	12	54	35	134	
37	21	46	34	35	Was also attributed to var. 33, 34, but they have sym. 42 as corrected.
38	21	60	38	123	
39	23	58	48	126	
40	28		45	65	
41	...				Omitted ; part of sym. 4.
42	29-32, 43	48	44	57	
43	24,35			32	
44	24	108		70	
45	38	96		63	
46	38	32c		39	
46a	40	32d			
47	23,37	49		34	
48	26,37	66b		29	
49	26	104		68	
*50	44				doubtful ; incomplete.
51					Probably on Var. 41.
52					Probably on Var. 42.
53					Probably on Var. 47.



# GEOGRAPHICAL DATA IN PĀṆINI'S ASHTĀDHYAYĪ\*

BY

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The most important contribution of the *Ashtādhyāyī* to the history of ancient India is its geographical information. The country, its mountains and ocean, forests and rivers, natural and territorial divisions (*Janapadas*), towns and villages have their share of attention in the shape of the linguistic material dealt with by Pāṇini. It is here that the grammarian can be credited with having created his own material in a very real sense by undertaking an original survey of the place-names in the vast area of the country from Afghanistan to Magadha.

The question may be asked as to the *raison d'être* of the rich geographical information that a work proclaimed to deal with grammar contains. The answer to this may be understood in the following manner. Grammar deals with the expressions and words forming a language, and the deeper a grammarian goes the more thoroughly does he explore the various departments of linguistic activities and the realms of language in search of his material. The analysis which Pāṇini gives us of the underlying meanings which relate place-names to human society, shows conclusively that place-names do not originate by mere accident, but are the outcome of social and historical conditions with which a community is intimately connected. These factors obtain currency in the language through the symbol of place-names. An etymological approach to the place-names of a country therefore introduces us to many a forgotten chapter of history and ethnography. In any future survey of Indian place-names, the most valuable

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\* A chapter from the author's Thesis on 'Pāṇini as a source of Indian History.'

chapter would be that contributed by Pāṇini and the principles of geographical nomenclature enunciated by him would offer a reliable scientific data.

Besides the list of endings to place-names noted by Pāṇini the scheme of his geography conceived in relation to language is based on some definite and clear principles. For example, most of the names of towns and villages result from one of the four factors enumerated in sūtras IV. 2. 57-70, *viz.*,—that (1) this is found there, (2) the place was founded by such and such a person, (3) the place was the abode of such a person or a community, and (4) the place is located in proximity to a known object: these together being commonly known as *Chāturārthika*. Then there are the names of famous places, derivative forms of which are adopted as part of personal names to indicate that the place had been the abode of one's ancestors (*abhijana*, IV. 3. 90), or one's own residence (*nirāsa*, IV. 3. 89).

Besides the above there may be a host of other relationships between a place and an object, *e.g.*, a thing may be imported from a particular place and therefore named accordingly, as the grape wine (*madhu*) of Kāpiśī called *Kāpiśāyana*, and a bull of Raṅku country known as *Rāṅkara* or *Rāṅkarāyana*. Since these *vṛttis* or meanings were found to be of too varied a character to be determined individually, Pāṇini has classified such cases under the general title of Śaishika dealt with in sūtra IV. 2. 92-145. The majority of instances of place-name endings are found under this context.

A third class of geographical names is represented in the *Ashṭādhyāyī* as regions or zones of population (*vishaya*, IV. 2. 52-54), *e.g.*, the territory occupied by the Śibi tribe, or more properly within the sphere of Śibis was known as *Śaiba* and that of the Āprītas (Afridis) as *Āprītaka*. The names according to *vishaya* are based on the ethnic distribution of population over

particular areas for the time being, and do not connote a reference to the nature of government or political organization prevailing in that area. This latter aspect of man's relationship with land is dealt with by Pāṇini under a separate heading. Here the geographical names originate from some constitutional significance and are reminiscent of original land settlement or land-taking by tribal groups. The countries occupied by them, the Janapadas, have undergone in course of time various forms of political evolution. Pāṇini knows two broad divisions, firstly Janapadas under Monarchical form of government (*Ekarāja* State) enumerated in sūtras IV. 1. 168-176, and secondly tribes organised as *Āyudhajīvī Saṅghas* and mostly settled in the Vāhika country, where, of course, the territories occupied by them must have been designated by their own names. For grammatical purposes the common name *Tadrāja* is applied to suffixes from both these classes of geographical names.

This in short enumerates Pāṇini's scientific classification of place-names on the basis of the linguistic principles underlying their formation. Names of rivers, forests and mountains are noticed not in connection with any social or historical significance, but as examples of linguistic peculiarity, such as vowel-lengthening (VI. 3. 117-120) or cerebralisation (VIII. 4. 4-5).

Kātyāyana and Patañjali following in the wake of Pāṇini supplement in a most valuable manner the information contained in the sūtras, and the latter especially is a very fruitful source, not only for additional details but also for verifying a good number of names included in the Gaṇapāṭha attached to Pāṇini's geographical sūtras. For example, we would not know without Patañjali the full list of the member States constituting the Sālva Janapada (*Sālṡāvayava*, II. 269) which will be discussed later. The names of Janapadas referred to by Pāṇini in sūtra IV. 1. 172 as beginning with the letter *n* are distinctly made known to us in the Bhāṣhya, e.g. Nichaka, Nīpa, (II.

269), and similarly it is owing to Patañjali that we can verify the reading of five names in the Rājanyādi group as being most likely given by Pāṇini himself, *e.g.*, Vasāti, Devayāta, Bailvavana, Ambarīshaputra, and Ātmakāmeya (*Bhāṣya* II. 282; IV. 2. 52).

## 2. COUNTRY.

*Geographical Horizon.*—The extent of the country as known to Pāṇini may be gathered by spotting a few important points in all directions on the map from out of the names available in the sūtras only. In the extreme north-west is mentioned Kāpiśī (IV. 2. 99), capital of the kingdom of Kāpiśa, which may have roughly coincided with Kafiristan, south-east of the Hindukush. The boundaries in this direction are further extended by the mention of Kamboja (IV. 1. 175) about the exact location of which there has been a lot of confusion, but the best view establishes its identity with the region of Badakshan-Pamir stretching to north and east of the Hindukush. South of Kāpiśī lay Gāndhāra (IV. 1. 169), comprising the valley of the Kabul river, with its frontier post at Takshaśilā (IV. 3. 93). Sindhu comes next in order, representing in ancient times the region between the Indus and the Jhelum and coinciding with what is known as the Sindhu-Sāgara Doab. The ancient name of what is now known as Sind was Sauvīra (IV. 1. 148) which was known to Pāṇini in some detail, since rules are formulated not only for the correct designation of place-names in the Sauvīra country (IV. 2. 76), but also of Gotra names current there (IV. 1. 150). Pursuing our progress eastward from Takshaśilā we traverse one by one the well-known Janapadas, as Madra (IV. 2. 131), Uśīnara (IV. 2. 118), Kuru (IV. 1. 172), Bharata, also referred to as Prāchya-Bharata since it was the dividing region between the north-west and the east (IV. 2. 113), Kosala (IV. 1. 171), Kāśī (IV. 2. 116),



Magadha (IV. 1. 170), and finally Kālīṅga on the shores of the eastern ocean (IV. 1. 170). This covers practically the whole of North India up to its natural frontier as included in the subsequent empire of the Mauryas. Two more names hitherto unidentified extend further the geographical horizon outlined above. In sūtra IV. 1. 170 Pāṇini refers to a Janapada which was also a kingdom, named Sūramasa. I am inclined to identify this name with the Sūrmā Valley and Hill Districts Division of Assam. This identification supported by sound philology extends the eastern limits of India as known to Pāṇini to her natural frontiers, *viz.*, the region subsequently known as Prāgjyotiṣa. Similarly in the extreme north-west we may extend the limits of Pāṇini's geographical horizon beyond Kamboja. In sūtra VI. 1. 153 he teaches the expression Praskaṇva as the name of a Rishi. The counter-example to this was Prakaṇva, name of a country as stated by the Kāśīkā. This country seems to be identical with modern *Ferghānā*, the inhabitants of which are mentioned by Herodotus as the Parikanioi.\* *Ferghānā* is exactly north of Pamir or the ancient Kamboja, and the Chinese Silk Route extending westward from Kashgar passed through this region.

In the north Pāṇini mentions the Himālayas as Himavat (IV. 4. 112), which is no doubt referred to as a word from the Chhandas literature. In the west Kachchha is referred to (IV. 2. 133), and also the islands situated along the sea course (*Dvīpādanusamudraṁ yañ*, IV. 3. 10). The southern horizon is limited by the country known as Aśmaka (IV. 1. 173), which lay along the Godāvarī with its capital at Pratishṭhāna, modern Paithāṇ.

*Divisions of the Country.*—Udīchya and Prāchya are the two divisions of the country mentioned by

\* I am indebted for this reference to Parikanioi and its identification with Ferghānā to Sten Konow (*Kharoshthi Inscriptions, Hist. Intro.*, p. xviii).

Pāṇini and these terms occur in connection with the linguistic forms known to the eastern and northern grammarians. This division is probably due to Pāṇini's imperfect acquaintance with the south. The Udīchya country included Gāndhāra and the Vāhika country, the latter in its turn comprising Madra, Uśīnara and Trigarta. The Kuru country was in the south-east of the Panjab and was also known as the Bharata Janapada. The Bharata region separated the east from the west, as is shown by Pāṇini's reference to Prāchya-Bharata on which Patañjali remarks that the proper Prāchya country lies outside the sphere of the Bharatas (I. 493; II. 4. 66 : *anyatra prāgrahāṇe Bharata-grahāṇam na bharati*). The river Śārāvātī (VI. 3. 120), is stated by subsequent writers to be the boundary between the countries called Prāchya and Udīchya, and it was probably the same as the river Ghagghara flowing through Ambala district.

It must be noted that for Pāṇini both the Prāchya and Udīchya divisions of the country provided the correct standard of a living speech. There appears to have existed an organic unity in the spoken language over this wide area and *Loka* and the *Śishtas* as understood by Pāṇini in relation to his standard language were not confined to one particular portion of the country. On the other hand we find in Patañjali's *Mahābhāṣya* evidence of an obvious contraction in the extent of the holy land or the country of the *Śishtas* whose language set the correct norm of speech. His *Śishtas* are the ideal Brāhmaṇas of Āryāvarata which is defined as the region south of the Himālayas, north of Pāriyātra, east of Ādarśa, west of the Kālakavana. Ādarśa is often understood as synonymous with *adarśana* or *vinaśana*, but the Kāśīka speaks of it as the name of a Janapada (IV. 2. 124), and Nageśa explaining Patañjali takes it as the name of a hill in Kurukshetra. According to the testimony of the Pāli literature Kālakavana was a part of Sāketa. It may be that inexorable political factors were responsible for the

re-orientation of the land of the Śishtas in the time of Patañjali. For Pāṇini no fragmentation of the country beyond what were its natural divisions was known; and not only is the extent of the country mentioned by him much vaster in its extension to the north-west, but he shows a surprising detailed knowledge of its various territorial constituents, including even towns and villages.

### 3. MOUNTAINS, FORESTS AND RIVERS.

*Mountains.*—Pāṇini's reference to *himānī*, a glacier (IV. 1. 49), and to *himaśratha*, melting of snows or thaw (IV. 4. 29), are taken from the vocabulary of the inhabitants of mountainous districts. Similarly *upatyakā* and *adhitykū* are expressions for a valley and a plateau respectively (V. 2. 34). We have already noted his reference to the Himālayas. In that connection the expressions Antargiri and Upagiri (with variant forms Antargiram and Upagiram, according to the opinion of Āchārya Senaka, (V. 4. 112), are especially noteworthy as being proper names mentioned in the Mahābhārata, the first for the innermost Himalayan range consisting of the highest peaks such as Gaurīśaṅkara, Nandādevī, Kedāra-nātha, etc., and the second for the outermost range of low-lying peaks rising contiguously with the plains on this side of our country (Sabhāparva, 27. 3; Jayachandra, *Bhārata-Bhūmi*, p. 109, 311).

Of specific mountain names mention is made of Tri-kakud (V. 4. 147), a mountain having three peaks, which name occurs in the Atharvaveda and later as the name of the mountain in the Himālaya, the modern Trikota (Vedic Index, I. 329); and Vidūra (IV. 3. 84), which was the home of the gem called vaidūrya, cat's-eye, which according to Patañjali was produced originally from Vālavāya and was only handled by the lapidaries in Vidūra, probably Bidar (cf. Pargiter, *Mark*, p. 365, for Vaidurya as Satpura). The name of Kiṁśulaka-giri occurs in sūtra

VI. 3. 117 which especially regularises the formation of the names of mountains and includes in its Gaṇapāṭha five additional names, *i.e.*, Śālvakāgiri, Añjanāgiri, Bhañjanāgiri, Lohitāgiri and Kukkutāgiri. None of these can be identified or is met with in literature except Añjana which is mentioned in the Marka. Purāṇa in the region of Magadha, and in a Jātaka passage as one of the six peaks of the Himalaya (DPPN., I. 40).

In sūtra IV. 3. 91, Pāṇini mentions peoples who lived by the profession of arms and were settled in hilly regions. (*Āyudha-jīribhyaśchhaḥ parrate*). It is interesting to note that these Highlanders hailed from the regions named Hridgola, Andhakavartta, Rohitāgiri, which may be located in the highlands of Afghanistan. The mention of Rohitāgiri suggests the possible identification of these hilly regions with the mountainous tracts in Afghanistan which is known as Roha. In the Mark. Purāṇa Nigarahara is referred to as the name of a region whose inhabitants lived in the mountains (*Parreatāśrayiṇaḥ*, Pargiter, p. 345), who may be the same as the people of Nagarahara near Jalalabad. It may be added that Patañjali gives several new names of mountain dwellers of which Mālāvatām (II. 287) is important as corresponding to Malakanda, the mountainous district north of Dargai, home of the Dārgalas in the country south of the Swat river.

*Forests.*—Several names of forests are mentioned in sūtras VIII. 4. 4-5, of which the five names enumerated in the first rule are the same as in the Koṭarādi gaṇa giving a list of forests names (VI. 3. 117). The Pura-gāvaṇa seems to be connected with Pātalipuṭra as the Gaṇaratṇa Mahodadhi in a very queer way associates Puragā with Pātalipuṭra (verse 291). Miśrakāvaṇa appears to be the name of the well-known forest of Misrikh in the Sitapur district. The Pāli literature, however, makes Missaka a mythical forest of the Tāvatiṃsa heaven (Jātaka, VI. 278; DPPN). The other names, *i.e.*,

Sidhraka, Sārika, Koṭara and Agra are obscure. Similarly names included in sūtra VIII. 4. 5, are not capable of definite identification since Pāṇini enjoins them both as proper and common names. As proper names some of them are referred to in Pāli books, and they may not have been big forests but simply groves of trees situated in the vicinity of big towns to which some celebrity had become associated. For example, Khadiravana occurs in the Anguttara Nikāya as the birthplace of the teacher Revata who was the foremost of the forest recluses and called Khadiravanīya after the place of his birth (*Jour. Dept. Letters*, 1920, p. 233). Similarly Śaravaṇa is said to have been a settlement in the neighbourhood of Śrāvastī where another great teacher Gosāla Mañkhaliputta was born (B. C. Law, *Śrāvastī*, pp. 10-11). Āmravaṇa is said to be attached to the city of Rājagriha and also Kāmpilya, but as the references are of a general nature it is not possible to suggest any definite identification. Forest tracts covered with herbs and trees and those which were used for the grazing of cattle are also mentioned (VIII. 4. 6).

*Rivers.*—Of the names of rivers in the sūtras we have Suvāstu (IV. 2. 77), the Swat river which with its tributary the Gaurī (mod. Panjkora), flowed through the heart of the Gāndhāra country and in the upper valley of which was Uddiyāna, the home of the famous Gāndhāra blankets or *pāṇḍu-kambalas* mentioned by Pāṇini. The western capital of Gāndhāra was Pushkalāvātī which is identified with modern Charsadda, a little above the junction of the Swat with the Kābul river. The Kāśikā mentions Pushkarāvātī as the name of a river in illustrations to not less than three sūtras (IV. 2. 85; VI. 1. 219; VI. 3. 119), where additional names are Udumbarāvātī, Viraṇāvātī, Maśakāvātī. Of these Maśakāvātī seems to be identical with the name of the river on which Massaga or Massaka, capital of the warlike people known as the Āśvakāyana, was situated. It is possible that Pushkalā-

*vatī* and *Maśakāvati* were the names of only those particular portions of the river Swat where it flowed past by these two great towns of Gāndhāra in the south and north respectively. It may be added that Patañjali mentions *Udumbarāvati*, *Maśakāvati*, *Īkshumatī* and *Drumatī* as definitely being names of rivers (II. 297). Of these *Udumbarāvati* may have flowed through the country of the Audumbaras, and *Īkshumatī* (also included in the *Madhvādi* group, IV. 2. 86), is identical with a tributary of the Ganges referred to as *Oxymagis* by Arrian and now known as *Īkhan* flowing through Farrukhabad district.

*Sindhu*.—The next great river in the north-west is *Sindhu* which gives its name to the country lying to its east, the present Sind-Sagar Doab (IV. 3. 93). Taking its rise from the snows of the highest Himalayan peaks on the outskirts of Kailāśa in Tibet the *Sindhu* flows north-west for about half of its length, and after reaching the Darad country on the north-west of Kashmir and south of Little Pamir, it takes a southward turn which determines its most eventful and romantic future course. The ancient Indians observed its debouching from the narrow defiles of *Dardistān* and recorded the same by the expression *Dārādī Sindhuḥ* found as a grammatical illustration to Pāṇini's sūtra prescribing the nomenclature of a river in accordance to its source (*Prabhavati*, IV. 3. 83).

Emerging from its Darad homeland the *Sindhu* enters the Gāndhāra country with Swat or *Uḍḍiyāna* on its right and the ancient Janapada of *Uraśā* (mod. *Kazara* in N.W.F.P.), on its left until it receives its most important western tributary the *Kabul* river at *Ohind*, a few miles north of *Attock* where it is at present crossed by a bridge. *Ohind* was the ancient *Udabhāṇḍa*, the place of transshipment of goods across the *Sindhu* and the spot where the great northern trade route called *Uttarapatha* in sūtra V. 1. 77 crossed the river. Pāṇini's own birthplace, *Śalātura*, was a riparian town of the *Indus* situated at a distance of only

about four miles from Ohind in the angle of the Kubhā and the Sindhu. About sixty miles east of Udabhāṇḍa was Takshaśilā, the eastern capital of Gāndhāra, and at an equal distance to the west was Pushkalāvātī (mod. Charsadda) its western capital.

The trans-Indus country was known in ancient times as *Pāre-Sindhu* (Sabhāparva, 51-11), a derivative expression from which *Pāreṇḍarū*, a mare from across the Indus, is mentioned by Pāṇini (VI. 2. 42). Of the trans-Indus regions the one which is especially mentioned both in sūtra and Gaṇapāṭha is Varṇu which corresponds to the Bannu valley forming a circular basin drained by two rivers the Kurram (Vedic Krumu) and the Gambila or Tochi which unite and flow into the Indus. The Kāśikā commenting on sūtra IV. 2. 103, speaks of Varṇu *deśa* named after the river Varṇu. It appears that the Kurram river after it left the Kurram Agency and from the point where it enters the Bannu valley was named Varṇu in ancient days. The place situated in proximity of Varṇu is mentioned as Vārṇava (IV. 2. 77, the gaṇa Suvāstvādi). Although the modern town of Bannu was founded only in 1848, the name of the valley from which the town derives its name was current in ancient times. On the left bank or the eastern side of Sindhu, was the famous Janapada of Kekaya comprising portions of the three districts Jhelum, Gujarat and Shahpur and having its natural association with the Saindhava hills or the Salt Range. Kekaya is mentioned in sūtra VII. 3. 2, apart from its being included in the Bhargādi group, (IV. 1. 178). South of Kekaya stretching north to south between the two rivers Jhelum and Indus was the Sindhu country proper, which is so commonly referred to in all ancient works. The last course of the Sindhu runs through the ancient Sauvīra country (IV. 1. 148), what is now modern Sind.

Of the rivers of the Panjab Vipāś (Beas) is mentioned by name in connection with the names of wells dug on its

right bank (IV. 2. 74). Pāṇini derives two peculiar expressions, Bhidya and Uddhya, in the sense of a river (*Bhidyoddhyau nade*, III. 1. 115). They are not mentioned elsewhere except for a solitary reference by Kālidāsa in the *Raghuvamśa* (XI. 8). In the *Imperial Gazetteer*, Vol. 15, under the entry Kashmir and Jammu there is on page 73 a reference to a river called the *Ujh* which must be located to the north-west of Madhopur on the Ravi, and on p. 107 mention is made of the Ravi and Ujh in the Jasrota district. There is a sort of a phonetic resemblance between the names Uddhya and Ujh. There is a stronger reason to look for Uddhya in Ujh. On Pāṇini II. 4. 7, the *Kāśikā* illustrating the compound names of two rivers quotes the example *Uddhyerāratī*, that is, Uddhya and Irāvati, the former of which we must consider as a tributary of the latter on the analogy of *Gaṅgāśoṇam*, another example of the same rule, and of the counter-example *Gaṅgā-Yamune*. The name Bhidya I am unable to identify but must be looked for in the river-system of the Panjab. Perhaps the names were derived from the fact that these streams dwindled in other seasons but became rushing torrents during the rains.

*Devikā*.—The name *Devikā* mentioned in sūtra VII. 3. 1, occurs frequently in ancient literature. Pargiter citing some epic references identified it with the river Deeg (Mārka. Purāṇa, p. 292). According to the *Nīlamata Purāṇa* the *Devikā* flowed through the Madra country (Bhagvaddatta, *History of India*, p. 162), and this is confirmed by the *Vishnudharmottara* (I. 167. 15; B.C. Law, *Geog. Essays*, p. 92). Pt. Bhagavaddatta identifies this *Devikā* of Madra with a stream going through Sialkot district and still called *Dyoka* (*loc. cit.*, p. 162). But it appears to me that Pāṇini's *Devikā* was the lake of that name in Kashmir, for Patañjali definitely speaks of some famous variety of rice grown on the banks of the *Devikā* and named *Dāvikā-Kūlāḥ śalayah* (III. 316; VIII. 3. 1), which fact cannot be reconciled with a



minor stream of Sialkot. Rice is by far the richest crop of Kashmir, as it is said of the Kashmiris that they have considered no crop worthy of attention save rice, their best fertile tracts being devoted to rice crop. Pargiter also expressed the opinion that Devikā mentioned in the Anusāsanaparva (25. 21), seems to be a lake, and may be the same as the Devikā mentioned in the Vanaparva as a lake of Kashmir (82. 107). The extent of the Devikā given in the Mahābhārata makes it a lake of considerable dimensions corresponding to which there is no other lake except the Volur (Wular in school atlases) which lies in the heart of the beautiful Kashmir valley and is a very important feature in the hydrographic system of Kashmir. Dr. Stein has stated that its dimensions vary at different periods, but in normal years may be reckoned at about twelve miles in length and six in width, which though not exactly agreeing with the Mahābhārata statement of Devikā lake as five *yojanas* by half a *yojana*, still afford the nearest approach to it in area. According to Stein the ancient names of lake Volur are Mahāpadmasaras and Ullola from which the present name Volur seems to be derived. It is also stated by Stein that the tract from the northern shores of this lake up to the amphitheatre of mountains bounding it on that side is very fertile (*Rājat.* II. 423). It may be in this region that the famous *Dāvikākūla* rice was grown. The vale of Kashmir abounds in superior rices and its fertile soil vivid with the light greens of the young rice affords conditions of climate and irrigation which few other places could rival. In certain areas is found a kind of soil called *bahil*, a rich *loam* of great natural strength in which there is always a danger that by over-manuring the soil will be too strong, and the rice plant will run to blade,\* that is,

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\* See *Imperial Geazetteer*, Vol. 15, Kashmir and Jammu, pp. 110, 115, 116 for an account of rices, the most important staple food of Kashmir which is infinite in variety and to which the cultivator devotes all his energy.

become what Pāṇini calls *stambakurī* (III. 2. 24), which was an epithet of *vr̥hī* according to Kātyāyana.

Of the rivers connected with the basin of the Gaṅgā and the Yamunā Pāṇini refers to Ajiravatī (VI. 3. 119) which is identified with Achīravatī on which the town of Śrāvastī was situated and which is now called Raptī, a tributary of the Sarayū. The name Sarayū is also mentioned in sūtra VI. 4. 174 in the expression *Sārara* which is an adjective from Sarayū. There are two well-known rivers named Sarayū, one in the kingdom of Kosala, and the other in Western Afghanistan flowing past Herat which preserves the memory of its ancient name. Sarayū in old Persian became Harayū (mod. Hari-rud), and in the inscriptions of Darius occurs the old Persian form *Haraīra* which is equivalent to Sanskrit Sārava mentioned by Pāṇini, in the sense of one who belonged to Harayū, *i.e.*, an inhabitant of that place. In the Behistun inscription the Susian or Elamite form of Haraiva is Arriya and this Province was mentioned by the Greeks as Aria. Although from the grammatical point of view the word-form Sarayū applies equally well to both the rivers of this name, the probability is that *Sārara* mentioned together with *Aikshrāka* suggests its connection with the eastern river, but this point cannot be stressed.

The river named Rathaspā as forming part of the Pāraskara group also deserves attention (VI. 1. 157 : Bhāshya, III. 96, Rathaspā nadī). This name occurs in the Ājimiñya Brāhmaṇa (Caland. JB., Extract 204), and in the Ādiparva (172-20), where it is one of the seven sacred rivers between Sarasvatī on one side and Gaṇḍakī on the other. Most probably it was a river of Pañchāla and the name may correspond to Rhodopha which is mentioned by the Greek writers as marking an important stage on the great royal road from the frontier to Patālipuṭra. Rhodopha is stated there to be 119 miles from the Gaṅgā although it is called a town but the

mention of the stages generally between the two well-known rivers as Jhelum and Beas, Sutlej and Jamna, suggests its having been the name of a river. (Megasthenes, *Fragm.* LVI; Rawlinson : *Intercourse between India and the Western World*, p. 64). It is yet indefinite which particular stream was the Rathaspā, or Rathasthā as the name occurs in the Ādiparva and also the Riktaṇtra Prātiśākhya (sūtra 209), but the distance of 119 miles, if the proposed identification of this name with Rhodopha be correct, lends us on the banks of the Rāmagaṅgā which is the only big river between the Gaṅgā and the Sarayū to present difficulties of crossing so as to merit the name Rathasthā, which must have been given to it in the Vedic period, and which is still in its upper courses known as Ruhut or Ruput (*Imp. Gazetteer*, U.P., I. 166). The distances from Hāstinapur on the Gaṅgā to Barielly on the Rāmgaṅgā and from there to Kanauj where that river falls into the Gaṅgā, almost confirm the stages of the Royal Road mentioned by Megasthenes from the Gaṅgā, which was probably crossed at Hāstinapur to the town of Callinipaxa, identified with Kanauj as the river Kālindī joins the Gaṅgā near it.

Śarāvātī is mentioned in sūtra VI. 3. 120, (*Śarādīnām cha*). Several rivers lay claim to this name (cf. Dey's *Geog. Dict.*), the one which separated the Udīchya from the Prāchya country has already been noted. Of the rivers of Central India Charmaṇvatī or the Chambal is mentioned (VIII. 2. 12). In the same sūtra reference is made to Rumaṇvat which Kāśikā connects with a place producing salt (*Larapa śabdasya Rumaṇa-bhāro nipātyāte*) and which was most likely connected with Rumā which is given as the name of a river or salt lake in the district of Sambhar in Ajmer which is also the source of the river Luni.\*

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\* Monier William's *Dictionary*, p. 884; *Vaidyakaśabdasindhu* by Umesa Chandra Gupta, p. 898.

Pāṇini refers to a desert region as Dhanva (IV. 2. 121), of which two examples are given by Patañjali, *viz.*, Pāre-dhanva and Ashtaka (II. 298), and another by Kāśikā as Airāvata. These appear to be ancient names and are yet to be identified.

#### 4. JANAPADAS.

The most important geographical term used by Pāṇini is the Janapada. A Janapada broadly comprised both urban and rural areas and was at once a geographical, political and cultural unit. The culture of a Janapada preserved its integrity through vicissitudes of time and to a great extent stood proof against too abrupt changes and the impact of foreign influences. Whereas the top realms of national life suffered devastating changes in the course of the country's eventful history, the life in the Janapadas continued to flourish in comparative immunity from external shocks. This culture was fixed and reflected in the manners and customs, the dialects and literary traditions of its people. The life in the Janapadas may be looked upon as one of the richest sources where vestiges of ancient traditions and institutions may be fruitfully studied. Philological and linguistic material of inestimable value is preserved in the languages of the Indian Janapadas, as instances of which we have the Darad Janapada with its Paisāchi dialect, the Śūrasena Janapada with its rich stock of Vrajabhāshā and the Kosala Janapada with its Avadhī language. A Janapada was not an artificial creation; in Pāṇini's time it was considered as a natural organic entity the members of which were bound by a consciousness of common unity expressed by means of the term *sajanapada*, *i.e.*, citizens of a common (*samāna*) Janapada (VI 3. 85), a term as significant in the terminology of those times as another equally important epithet, *viz.*, *sabrahmachārīn*, which denoted the members of one common Vedic school.

The Bhuvana-kosha lists embodied in the Mahābhārata (Bhīṣmaparva, chapter IX), in the Mārkaṇḍeya, Brahmanāṇḍa and Vāyu Purāṇas and elsewhere as in the Brihat-Samhitā of Varāha Mihira, consist mainly of the names of Janapadas which were inhabited by peoples bearing corresponding names. A correct identification of these is essential for building up India's regional history, an indispensable pre-requisite of a sound and comprehensive national history. In any future study of Indian Janapada names the evidence from Pāṇini's *Aṣṭādhyāyī*, the Gaṇapāṭha, Patañjali's *Mahābhāṣya* and finally the *Kāśikā* will be found most valuable. In the following study foremost place is naturally given to those names which are mentioned in the sūtras of Pāṇini, but it does not mean that the names in the several gaṇas are to be ascribed to a later date as a general rule. Of the sixteen Mahājanapadas described in Buddhist books the names of at least nine are found in the sūtras, *viz.*, Magadha, Kāśi, Kosala, Vṛjji, Kuru, Aśmaka, Avanti, Gāndhāra and Kamboja.

The following are the names of the Janapadas from Pāṇini arranged according to a geographical scheme:—

1. *Kamboja* (IV. 1. 175). Kamboja is mentioned in the sūtras as the name of a country and the form is the same for its king and a descendant of the Kshatriya tribe settled there. It is included in the list of *Ekarāja* Janapadas and possessed a regal form of Government. It is included twice in the Gaṇapāṭha, Kachchhādi (IV. 2. 133), and Sindhvādi (IV. 3. 93), which have eight names in common, *viz.*, Sindhu, Varṇu, Gāndhāra, Madhumat, Kamboja, Kāśmīra, Sālva, and Kuluna, which I consider to be authentic readings in both groups. The correct identification of this Janapada is the key to determine the relative geographical positions of other countries in the extreme north-west of India and Afghanistan. Gāndhāra, Kāśi, Bālhika, and Kamboja are the four great Janapadas the relative positions of which

should be clearly understood. Of these Gāndhāra extended from Takshaśilā, its eastern capital to the river Kunar its western boundary, and from the river Kabul in the south to the upper reaches of the Swat in the north. Next to it was the kingdom of Kapiśa coinciding with modern *Kafiristan* and occupying the whole area between the river Kunar and the Hindukush. The latter mountain known to the Greeks as Paropanisidai and referred to in the Behistun inscription as Parruparaesana (equal to Sanskrit Upariśyena, beyond the Eagle's Flight), separated *Kapiśa* from Bālhika. Sometimes Kapiśa politically formed part of Gāndhāra, as in the reign of Darius, and then the name Gāndhāra was applied to both of them. In none of these three Janapadas can we find a place for Kamboja. Dr. H. C. Roy Chaudhry places Kamboja in the region of Rājapurī or Rajauri which was in fact the ancient Abhisāra country, and Sir Aurel Stein locates it in the eastern part of Afghanistan (Raj. IV. 165), but as we have seen there is hardly place for Kamboja in that direction. Pt. Jayachandra Vidyānāth suggests the location of Kamboja in the north of the Hindukush from Badakshan to Pamir (*Bhārata-Bhūmi*, pp. 297—303). Kamboja as equivalent of Pamir-Badakshan satisfies all ancient references and data. It was a country famous for horses and rubies. Lassen was right when he, although doubtfully, placed Kamboja south of Kashgar (Pargiter, Mark. P., p. 318, f. n.) The linguistic peculiarity mentioned by Yāska that the root 'savati' 'to go' is used by the Kambojas, is still a living fact in the Ghalcha dialects spoken in the region of the Pamirs and the countries on the headwaters of the Oxus river (Grierson, *Linguistic Survey*, X, pp. 467, 473, 474, 511, 527). Dr. Moti Chandra supports this identification by a still stronger evidence by pointing out that the country of Dvārkā which is mentioned with Kamboja in the Paramatthadīpinī (P.T.S., p. 113) on the Petavatthu, is the Darwāz country lying to

the north of Badakshān, which is in fact the exact Persian translation of Dvārka. Kamboja was thus the Pamir region, north of Dardistan, and was once inhabited by the Iranian-speaking peoples.

2. *Prakanva*. This is implied as a counter-example to Praskaṇva in sūtra VI. 1. 153 and is stated by the Kāśikā to have been the name of a country. A possible identification is suggested with the people mentioned by Herodotus as Parikanioi, *i.e.*, the inhabitants of modern Ferghāna (Sten Konow, *Corpus of Kharoshthī Ins.*, p. xviii), who are said to have formed part of the empire of Darius. Geographically Ferghāna is situated immediately to the north of Pamir or ancient Kamboja.

3. *Gāndhāra*. Pāṇini mentions both the earlier form Gandhāri denoting the Janapada and its people (IV. 1. 169), and its later form Gāndhāra (only in the Gaṇapāṭha, IV. 2. 133; IV. 3. 93). The Greek forms of the name, Gandaritis and Gandarae point to the name Gāndhāri which it appears had reference more to the people inhabiting the Janapada which derived its name from them (*Vedic Index*, I. 219). It was the most important Janapada in the whole of North-West India. Its relative extent from the valley of the Kabul to Takshaśilā has been pointed out above. Pushkalāvātī is mentioned as the name of a river in the Gaṇapāṭha and certainly implies the town of Pushkalāvātī (Greek Peucelaotis, modern Charsadda near the junction of the river Swat with the Kabul) which was a capital of Western Gāndhāra. The Pushkalas of the Mārkaṇḍeya Purāṇa must be the people of this region (Pargiter, p. 320). The country between the rivers Suvāstu and Gaurī was known as Uḍḍiyāna which Kātyāyana mentions as Aurdāyni and which was considered in ancient days a part of Gāndhāra (*Bhāshya*, II. 292). A special variety of blankets known as Pāṇdu-kambala (IV. 2. 11), were made in Gāndhāra.

4. *Sindhu*. Sindhu was originally the name of a river, which gave the name to the whole country. The old

Persian form in the inscription of Darius from Susa is *Hidauv*, which is a locative singular form of *Hindu* occurring at Hamadan. In Indian literature Sindhu often occurs as the name of a Janapada linked with Sauvīra and may be identified with the country lying between the Jhelum and the Indus and now known as Sind-Sagar Doab. Most of it is now a sandy desert known as the Thal. It is the producing centre of a fine breed of horses often referred to in the Buddhist literature and of camels. I have shown elsewhere that a portion of it was named *Idaviḍ* mentioned by Patañjali as a Janapada (Bhagwanlal Indraji Com., Vol. p. 149). The Thal is peopled by Jat tribes, who call themselves 'camel-hearted.'

5. *Sauvira* (IV. 1. 148). This is reckoned as an important Janapada in both the Buddhist and Brahmanical literature with its capital at *Rorura* or *Rauruka* which is represented by modern Alor or Rori, where there are extensive ruins and which according to Cunningham was known to have been the capital of Upper Sindh for many years. This points to the identification of Sauvīra with Upper Sindh. Pāṇini mentions Sauvīra with special reference to some of its gotra names of which two are specifically named by him as Phāṇṭābhṛiti and Mimata. Of other names the *Kāśikā*, obviously citing older authorities, mentions Bhāgavitti, Tārṇabindava, Akaśāpeya, Yāmunda and Suyāmā. Bhāgavitti is mentioned by Patañjali also (II. 243), and suggests a probable identification with the Bugti tribe settled on the northern borders of Sindh, and consisting of about thirty thousand people. Pāṇini mentions Śarkarā or Śārkara (IV. 2. 83) as a place-name under the *Chāturārthika* suffixes which appears to be the old name of Sukkur, the great city of Upper Sindh situated on the Indus.

6. *Brāhmaṇaka* (V. 2. 51). Patañjali in explaining this name calls it a Janapada (*Brāhmaṇako nāma Janapadaḥ*, II. 298). This is obviously the country mentioned by the Greeks as *Brachmanoi* (Arrian, VI. 16),



placed in middle Sindhu and identified with Brahmanabad by Cunningham (*Ancient Geog.*, p. 310). Mr. Majumdar rightly finds in it a reference to Brāhmaṇavaha of *Kārya Mīmāṃsā* enumerated amongst Janapadas of the west (p. 93; *Majumdar, Notes*, p. 691). Jayaswal takes the Government of this Janapada to have been republican in form and quotes from Plutarch that these Philosophers gave Alexander a tough resistance equal to that of the mercenary soldiers or *āyudhājīvins* and also preached the philosophy of freedom to other free states (*Hindu Polity*, I. 76). Patañjali has referred to an *a-Brāhmaṇaka* and an *a-Vṛishalaka* country (I. 301). These names answer best to the two countries named Śaudrāyaṇa and Brāhmaṇaka respectively. Śaudrāyaṇa is included in the group Aishukāri and others (IV. 2. 54), which denoted names of countries after the peoples occupying that territory (Vishayo deśe). Like the Brāhmaṇas they also are mentioned by the Greek writers as having opposed Alexander in the fourth century B.C. under the name of the *Sodrae*. Cunningham identifies their descendants in the Soda Rajputs of the present day, now occupying the south-eastern district of Sindh, roundabout Umarkot, but whose territory is said to have once extended to the north of Alor on the left bank of the Indus (Cunningham, *Ancient Geog.*, p. 291). Diodorus writes that the Sodrae and the Massanae were the two nations occupying the opposite banks of the river Indus. Cunningham considers that the Massanae of Diodorus are the Mausarnaioi of Ptolemy whose name still exists in the district of Muzarak to the west of the Indus below Mithankot (*op. cit.*, p. 291). The latter form of the name suggests identification with Masūrakarna and its derivative Mausūrakarna included in the Gaṇpāṭha (II. 4. 69; IV. 1. 112). (G.S.S.)

7. *Apakara*. This name is mentioned along with Sindhu in sūtra IV. 3. 32, teaching the derivative forms Apakaraka and Āpakara to denote something produced

in the country of Apakara. The exact identification of this name is unknown.

8. *Pāraskara* (VI. 1. 157). This is mentioned at the head of the gaṇa designated Pāraskara-prabhṛiti. Patañjali equates Pāraskara with the name of a country (*Pāraskaro deśaḥ*, III. 96). The name corresponds to Thara-Pārakara (Thara being the Sindhi form of Thala meaning a dry country or desert, as opposed to Kachchha or jāṅgala country, one of the biggest districts of Sindh which once denoted the whole of its south-eastern part up to the coast of the Great Rann of Kachchh or Kachchha-Triṇa. (For Pāraskara as Parakar, see Kunte's *Vicissitudes of Aryan Civilization*, p. 372, and his map; Dey, *Geog. Dict.*) The Riktantra mentions Pāraskara as the name of a mountain, but the spelling was Pārakara when it was the name of something other than a mountain (*Pāra parcate*, IV. 5. 10, Suryakant's edition, p. 41).

9. *Kachchha* (IV. 2. 133). To the south of Parakara lies the province of Kachchh which as pointed out above was the climatic antithesis of Thala and represented the water-logged portions in the south as against the dry desert area in the north. Kachchh was historically connected with Sindh forming its province in the seventh century when Hiuen Tsang visited the country. Cunningham says that Kachchh and Parkara have always been linked together (*Anc. Geog.*, p. 347). Pāṇini refers to the names of towns also ending in Kachchha (IV. 2. 126), which were mostly situated along the coast from Bhṛigu-Kachchha to the province of Kachchha. The inhabitants of the Kachchha Janapada were known as Kāchchhaka, and a reference to their manner of laugh and talk is found in the Kāśikā illustrating their personal peculiarities or mannerisms.

10. *Kekaya* (VII. 3. 2). The descendants of the Kshattriyas of the Kekaya Janapada were known as Kaikeya. They were a powerful and famous nation, and

were noted bowmen (Sabhāparva, IV. 32). The ancient *Kekaya Janapada* consisted of the territory now comprised by the three districts of Jhelum, Shahpur and Gujarat. The Salt Range was the cradle of the hardy Kekayas who are identified with the Gakhars, the dominant race in this part of the country.

11. *Madra* (IV. 2. 131). Madra was included in the Vāhika country and coincided with the territory roundabout Sialkot. The capital of Madra was at Śākala, the ancient form of Sialkot. In the Mahābhārata Śākala is said to be the chief city of the Vāhikas and to have been situated on the Āpagā river. Cunningham recognised the same in the Ayak Nadi, a small stream which has its rise in the Jammu hills to the north-east of Sialkot and passing that city runs westernly near Sodhra where in the rainy season it throws off its superfluous water in the Chenab (*Anc. Geg.*, p. 212). Patañjali mentions Śākala as a Vāhika-grāma (II. 294) and it is found in the Kāśikā as an illustration of the same in sūtra IV. 2. 117. Pāṇini accepts Vāhika as a proper name without going into its etymology, but Kātyāyana derives it from *bahis*, outside, by adding the suffix *Ikak* (IV. 1. 85. 5). This attempt on the part of Kātyāyana to rationalize well-known proper names extends to several other words also, as Dārvāghāṭa (III. 2. 49. 1, plateau of the Dārva country). Probably there were in the time of Pāṇini two Madras distinguished from each other as eastern and western, Pūrva-Madra and Aparā Madra (*Diśo Madrānam*, VII. 3. 13; also IV. 2. 108). The Aparā Madras may be the same as the Uttar-Madras which were placed somewhere beyond the Himālaya in the vicinity of Kamboja (*Vedic Index*, I. 85).

12. *Uśīnara* (IV. 2. 118). Pāṇini definitely mentions the Uśīnaras as forming part of the Vāhika country (cf. Kāśikā on IV. 2. 118, *Uśīnareshu ye Vāhika-grāma*). In the Gopatha Brāhmaṇa the Uśīnaras and Śavasas are regarded as northerners (II. 9. *Śavasa-Uśīnareshu*

*Udīchyeshu*). The first part of the compound, Śavasas, is often amended as Vasas which is identified with the kingdom of the Vatsas or Vamśas (cf. *Vedic Index*, I. 103). But from a reference in the Divyāvādāna to the kingdom of the Śrasas in Uttarapatha with headquarters at Taxila where Asoka served as Viceroy in the remoter provinces of his father's empire (R. K. Mookerji, *Asoka*, p. 3), it appears that Śavasas was the real name of the Janapada in the Udīchya country, traces of which may be found in the name Chhibha or Chhibhala applied to the country between the Chenab and the Jhelum at the foot of the outer Himalayas situated to the north-west of Madra and comprising the states of Punch (Parnotsā), Rājauri (Rājapuri), and Bhimbhara, which was also known as Abhisāra, a name which is quite unconnected with the name of the people, the Chhibhas, who live there. We thus get distinct geographical affiliation of four great Janapadas in the Vāhika country, viz. Madra and Uśīnara, occupying the Rechna Doab in the north and south respectively, and similarly Śavasa and Kekaya in the Jech Doab. In literature the Uśīnaras are associated with the Śibis whose chief town Śibipura has been identified with Shorkot, headquarters of a Tehsil in the Jhang district, having a huge mound of ancient ruins. Uśīnara is included in the Yaudheya group (IV. 1. 178), by which a female of the Uśīnara country was called Auśīnarī.

13. *Ambashṭha*. It is referred to by Pāṇini in sūtra VIII. 3. 97, and stated by Patañjali to be implied in sūtra IV. 1. 171 as the name of a Janapada under a monarchical government. In the Mahābhārata they fight on the side of the Kauravas under their king, and are definitely a north-western people. Their exact identification is doubtful. M'Crindle proposed to identify them with the Abastanoi or more correctly Sambastai mentioned by Diodorus on the lower course of the Chenab (*Invasion of Alexander*, p. 155), but it is extremely doubtful if they can be connected with the people called the Sabarcae by

Curtius, and Sabagrae by Orosius, as suggested by him, which names correspond much better with Śaabhreya mentioned by Pāṇini (IV. 1. 123, also included in the Yāudheyadi groups, IV. 176; V. 3. 117) (cf. also B.C. Law, "The Ambashthas," *Journal of Indian History*, 1934, pp. 74-76).

14. *Trigarta*. It is mentioned by Pāṇini more in connection with the Āyudhajīvī Saṅghas of which a League of Six States was known as Trigarta-Shashṭha (V. 3. 116). The Trigarta country, in itself marked out by natural boundaries from the rest of the province was partitioned into smaller territorial divisions or Janapadas some of which were constituted as monarchies. The name Trigarta implies the valleys of three rivers, viz., those formed by the upper courses of the Ravi, Beas and Sutlej. Pathankot is the entrance to the Kangra valley. Cunningham who identified it as the capital of the Audumbaras writes that the name is also written Paithan and is quite unconnected with that of the Pathans of Roh or Afghanistan (*ASR.*, XIV, p. 116), and says that the name of the place is a genuine Hindu word derived from Pathana a road (*ASR.*, V, p. 153). The name suggests identification with Pātānaprastha which is stated by Patañjali to be a Vāhika-grāma (II. 298). The central portion of Trigarta formed by the valley of the Beas was named Kulūta, which is mentioned twice in the Gaṇapāṭha as Kuluna (IV. 2. 133; IV. 3. 93), now called Kulū of which the ancient capital was at Nagara on the left bank of the Beas river, which appears to be the same name as read in the Katryādi gaṇa (IV. 2. 9). North of Kulūta lies Champā, ancient Champā the reading of which in the Gaṇapāṭha is doubtful. South of Kulūta are two important states, Mandi and Suketa both of which appear to conceal ancient names. The former seems to have been derived from Maṇḍamatī (Yavādi group. VIII. 2. 9), and the latter from Sukuṭṭa which is mentioned in the Mahābhārata as the name of a people along with the Kulindas and Sālvas

(Sabhāparva, 14. 27). Pāṇini makes special mention of the Bhārgāyaṇa gotra amongst the Trigarta country (IV. 1. 111).

15. *Kalakūṭa* (1. 1. 173). This name occurs in the sūtra as that of a Janapada under a king. Outside the grammatical literature we find this name only in the Sabhāparva where it is placed in the sphere of Kulinda (*Kulinda-vishaye*, XXVI. 3), and is said to have been conquered by Arjuna. The form of the name in the Epic is with a long vowel as Kālakūṭa. Kulinda was the name of the country extending from the Upper Jamna to the Sutlej including the Simla hill states and parts of Dehra Dun. According to Ptolemy its ancient name was Kylindrine designating the region of the lofty mountains wherein the Vipāśa, the Śatadru, the Yamunā and the Gaṅgā had their sources (M'Crindle, *Ptolemy*, pp. 105-109). Kalakūṭa must have been the name of a Janapada in this territory and the name which corresponds to it is Kalka, an important town and mart placed at the foot of the Simla hills.

16. *Kuru* (IV. 1. 172). It was the well-known country beginning from Kurukshetra and extending up to the Gaṅgā. Hāstinapur, which was the capital of Kurus, is mentioned by Pāṇini (VI. 2. 101). A special reference is made to the family organisation in the Kuru country as *Kuru-gārhapataṃ* (VI. 2. 42).

17. *Sālva* (IV. 1. 175). The country of the Sālvas appears to be vast in extent having several constituent Janapadas mentioned as *Śālvāvayava*. According to Patañjali Bodha, Ajakranda and Ajamīḍha were included in the Sālva country (II. 269; IV. 1. 170). None of these names agrees with the list of the Sālvas given in the Kāśikā, which consists of the following names: (1) Udumbara, (2) Tilakhala, (3) Madrakāra, (4) Yugandhara, (5) Bhūlinga, (6) Śaradaṇḍa. Of these Yugandhara is a familiar old name. It is mentioned by Pāṇini himself in sūtra IV. 2. 130 along with Kuru on which the Kāśikā remarks

that both are the names of Janapadas. The Kāśikā also mentions Yugandhara as the name of a mountain (III. 2. 46, *Yugandharaḥ parvataḥ*) which was perhaps connected with the Yugandhara Janapada. In a verse quoted in the Mantra-pāṭha is found an allusion to the Sālva women working their spinning wheels on the banks of the Yamunā, which shows that the territory of the Sālvas once extended up to the Jamna\* (*Vedic Index*, II. 440). The implication of the verse is that Yaugandhari was king of the Sālvas settled near the Yamunā, and this suggests the location of Yugandhara in the region of Jagādhari near the west bank of the Jamna. The popular derivation of Jagadhari from Ganga Dhair is to be dismissed as fanciful, and in all likelihood it preserves the ancient name Yugandhara.

The Udumbaras, members of the Sālvas according to Kāśikā, are included in the Rājānyadi group (IV. 2. 53). Patañjali seems to confirm this as he mentions the Udumbaras along with the Bodhas, another member of the Sālva Janapada (I. 489). The Audumbara coins are found in the Kangra and Hoshiarpur districts of the Panjab and perhaps they dwelt in the country between Kangra and Ambala (*Hindu Polity*, I. 10). The coins show that the Udumbaras were governed by a king, and that agrees with the implication of Pāṇini's rule about Sālvāvayava. The river Udumbaravātī frequently mentioned in grammatical illustrations must have flowed through the Udumbara country.

The Madrakāras are stated to be a member of the Sālvas. The word Madrakāra is understood as the warrior-troops of the Madras (Les Sālva, *op. cit.*) and probably contains an illusion to the union of the Madras

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\* *Yaugandharireva no rājeti Sālvir-avādishah, Vivṛitta-chakrā āśinās tīreṇa Yamunā tava.* 'The Sālva women turning wheels, sitting on the bank, O Yamunā, have told us that their king is a Yaugandhari' (Un ancient people du Penjab: Les Sālva, *Journal Asiatique*, 1929, p. 314.) Keith considers a reference to war-like raid more plausible.

and the Sālvas typified in the marriage of the Sālva prince Satyavān and the Madra princess Sāvitrī related in the Mahābhārata. The offspring of this marriage was a race of Kshattriyas, the hundred sons of Sāvitrī called Sāvitrī-putrakas, mentioned both in the Mahābhārata (Vanaparva, 297. 58-59: Karṇaparva, V. 49) and in the Gaṇapāṭha of Pāṇini (V. 3. 116).

It must be noted, however, that the name Madrakāra does not occur anywhere in literature, and it is not unlikely that the original reading was Bhadrakāra who are mentioned in the epic (Sabhāparva, 14. 27) along with the Bodhas who were also a member of the Sālvas. The place-name Bhadra which is the headquarters of a tahsil in the extreme north-west of the state of Bikaner and is only a few miles from the present Panjab border, seems to preserve the old name of the Bhadrakāras or the Bhadras. Its location on the banks of the Ghaggar also suggests its having been once a town of importance. The extension of the Sālva country further westward into the heart of the present Bikaner state is made plausible by Pāṇini's reference to the famous breed of bulls of the Sālva Janapada (IV. 2. 136) which as shown in the section on fauna refers to the well-known Nagauri breed.

In the Gopatha Brāhmaṇa the Sālvas are mentioned as being adjacent to the Matsyas, and this makes their locality coincide with the state of Alwar. In a way the vast stretch of land from the ancient boundary of the Śūrasena Janapada up to Nāgaur was included in the Sālva Janapada. The name Bhūliṅga, a member of the Sālvas, corresponds to the Bolingæ of Ptolemy who are placed in the north-west of the Aravallis.

The Śaradaṇḍas appear to be placed somewhere on limit of the Sālva territory. A Śaradaṇḍā river is mentioned in the description of the route leading from Ayodhyā to the Kekaya country and must be placed somewhere between the Gāṅgā and the Yamunā (Ayodhyākāṇḍa, 68. 15). The Śardanas of the Mark. Purāṇa



(Parg., p. 378) appear to be the Śardaṇḍas whose location agrees well with each other.

The Sālveyas are mentioned as a separate Janapada by Pāṇini (IV. 1. 169), obviously connected with the original Sālvas, and placed by Pargiter to the west of Aravalli Hills (*JRAS.*, 1908, p. 325 and Map).

18. *Pratyagratha* (IV. 1. 173). Name of a Janapada that is not identified or found elsewhere.

19. *Ajāda* (IV. 1. 171). It is also not mentioned outside the *Aśtādhyāyī* and remains unknown. The name suggests a probable connection with a country rich in pastures for goats such as in the Etawah district which is still famous for its remarkable breed of goats.

20. *Raṅku* (IV. 2. 100). A man of Raṅku country was called Rāṅkavaka, a bull as Rāṅkavāyana and a blanket as Rāṅkava as explained by the commentary on the sūtra. There is no clue in literature to identify this Janapada, but Dr. Motichandra on the basis of the Rangkas language suggests that the Raṅku country may be identified with Malla (upper) Johara in north-western corner of Almora and Malla Danpur situated in west and south-west of Johara villages where the language is spoken. The area of ancient Raṅku must have been much bigger than at present (*Indian Costume, Bhārtiya Vidyā*, Vol. I, p. 46, note; for the Rangkas language see *Linguistic Survey of India*, Vol. III, Pt. I, p. 479).

21. *Bhāradvāja* (IV. 2. 145). The Kāśikā points out clearly that Bhāradvāja in this sūtra is not a gotra but the name of a country. As Pargiter has remarked Bhāradvāja is often mentioned in the Mahābhārata in connection with the upper part of the Ganges near the hills, and the Bhāradvājas were no doubt his descendants living in Garhwal (Mark. Purāṇa, p. 320). The Ātreyas are mentioned along with the Bhāradvājas both in the Bhīshmaparva and Mārkaṇḍeya

Purāṇa lists, and Pāṇini also mentions them as a section of the Bhāradvāja gotra (*vide* Gaṇapāṭha Aśvādi, IV. 1. 110, *Ātreya Bhāradvāja*).

22. *Kosala* (IV. 1. 171). A well-known Janapada of the east which was ruled by a powerful monarchy and reckoned amongst the Sixteen Great Countries. We have no information from the *Ashṭādhyāyī* about its capital in Pāṇini's time. Śrāvastī is mentioned as a place-name in a gaṇa along with Vārāṇasī and Kauśambi. Sarayū and Ikshvāku are also mentioned in a sūtra (VI. 4. 174).

23. *Kāśī* (IV. 2. 116). It is certainly a place-name and probably a Janapada or country of which the capital was at Vārāṇasī mentioned separately in the Gaṇapāṭha. There is no indication that it was an independent monarchy like Kosala.

24. *Vṛjī* (IV. 2. 131). It was the name of a Janapada which as we know from the Buddhist literature included the territories of the Videhas and the Lichchavis (*Buddhist India*, p. 25).

25. *Magadha* (IV. 1. 170). A famous Janapada which occupied the country now represented by Bihar south of the Gaṅgā. It was a powerful monarchy under Bimbisāra and Ajātaśatru having political relations with Kāśī and Kosala. The royal constitution of Magadha is referred to by Pāṇini also.

26. *Kaliṅga* (IV. 1. 170). Pāṇini mentions Kaliṅga as a kingdom, but it is not included in the traditional list of the Janapadas. In Pāṇini's time Orissa appears to have formed part of Kaliṅga.

27. *Sūramasa* (IV. 1. 170). There is no indication to determine the geographical position of this Janapada, but on the basis of a striking similarity of names we may identify it with the Sūrmā valley and Hill Districts Divisions of Assam. Pāṇini's geographical horizon extending up to Kaliṅga in the east may very well have included Assam as being the eastern-most limit of India.

Sūramasa is read after Magadha and Kaliṅga, and possibly it represents the old name of Assam.

28. *Avanti* (IV. 1. 175). Name of a country of which the capital was Ujjayinī which is referred to only in the Gaṇapāṭha (IV. 2. 82; IV. 2. 127). The Avanti Janapada was closely connected with the Vindhyas.

29. *Kunti* (IV. 1. 175). Patañjali takes this along with the former as implied in rule IV. 1. 171 (Janapada names ending in short *i*). They appear to be adjacent neighbours of the Avanti. The Mahābhārata mentions a river called Aśva Nadi flowing in the Kunti country (Vanaparva, 308. 7), which is said to be a tributary of the Chambala (Dey, *Geog. Dict.*, p. 129). Pāṇini mentions Kunti along with Surāshṭra which would make the two Janapadas located in proximity of each other (VI. 2. 37).

30. *Aśmaka* (IV. 1. 173). This country is placed by the Rāmāyaṇa in the middle of India (Pargiter, *op. cit.*, p. 336). According to Professor Rhys Davids Aśmaka was the same as Assaka of which the position was immediately north-west of Avanti. This is also indicated by the compound name *Aranty-Aśmakāḥ* mentioned in the Gaṇapāṭha (VI. 2. 12). The settlement on the Godāvarī with its capital at Pratishṭhāna or Paithana may have been a later colony (cf. *Buddhist India*, p. 28).

The above is a list of Janapadas compiled from Pāṇini's sūtras only. This gives us a chain of names extending from the extreme north-west to the extreme eastern end of the country. Each Janapada was marked by boundaries (*Janapada tadavadhyoścha*, IV. 2. 124) indicated by other neighbouring Janapadas, for, as the Kāśikā says, only a Janapada marked the boundaries of another Janapada. The Gaṇapāṭha also may be helpful in furnishing a trustworthy list of additional names of Janapadas which interpreted with the foregoing would make the picture of the geographical horizon known to

Pāṇini more complete in detail and depth. To mention only a few important names we find a reference to *Barbara* (IV. 3. 93; bordering the sea-coast near the estuary of the Indus where the port Barbarika was situated; *Kaśmira* (IV. 2. 133; IV. 3. 93); *Uraśā* (IV. 3. 93, modern Hazara); *Darad* (IV. 3. 93, modern Dardistan); *Gabdikū* (IV. 3. 93, placed outside Aryāvarta by Patañjali, and recognizable as the original homelands of the Gaddi tribe called Gadderan beyond Dhaulidhar in the Chambā valley), *Paṭachchara* (IV. 2. 110) mentioned in the Mahābhārata perhaps the country on the south bank of the Sarasvatī noted for the depredatory tendencies of its people where the Yādava women were also plundered; *Yakṣilloman* (IV. 2. 110) placed south of Śūrasena (Bhishmaparva, IX. 46 and Virāṭaparva, V. 4) and corresponding to the territory lying between Etawah in the north and Jalaun and Orai in the south and Kalpi in the east, and *Sarvasena* (IV. 3. 92), also called Sārvaseni, cf. Kāśikā, VI. 2. 33; VIII. 1. 5, which is said to be a rainless country.

A further instalment, and that is a very substantial one, of geographical information is obtainable from the *Ashṭādhyāyī* in the form of tribal names of people who were living under political constitutions of a varied character, and these will be discussed in a subsequent chapter.

### TOWNS AND VILLAGES

The units of the settlements of population consisted of big cities (*nagara*), villages (*grāma*), colonies of herdsmen who were often moving with their ranches (*ghosha*, VI. 2. 85) and smaller hamlets called *kheṭa* (VI. 2. 126). Pāṇini distinguishes between a *grāma* and *nagara*, as in sūtra *Prāchām grāma-nagarāṇām* (VII. 3. 14). but in other sūtras he treats *grāma* to include bigger centres of population also, e.g., when he refers to *Vāhika grāmas* (IV.

2. 117) and *Udīchya grāmas* (IV. 2. 109) he certainly intends *nagara* also by that word. Patañjali discussing the distinction of meaning between these two words lays down that a common-sense view should be taken in the matter and that there is no use arguing to logical conclusion where the usage of the people is involved (*tatrāti-nirbandho na lābhaḥ*, III. 321).

*Place-name Endings*.—For purposes of grammatical regulations Pāṇini analyses place-names in terms of the final word or ending, of which an interesting list may be compiled as follows:

1. *Nagara* (IV. 2. 142). An important ending found in many old names and one which has like *pura* continued throughout the history of Indian place-names up to our own time. According to Pāṇini this was used both in the eastern and northern divisions of India, the accentuation of which is regulated by sūtra, VI. 2. 89 which teaches an initial acute accent for place-names ending in *nagara* in the east of India. Two specific names of eastern cities are mentioned as Mahānagara and Navanagara.

2. *Pura* (IV. 2. 122). A common place-ending like No. 1; as examples Pāṇini himself mentions Hāstinapura, Phalakapura, Mārdeyapura (VI. 2. 101). The first was the capital of the Kuru Janapada, now situated on an old bed of the Gaṅgā, twenty-two miles north-east of Meerut. He also refers to Arisṭapura and Gaudapura (VI. 2. 100), the former may be identified with Aritṭhapura mentioned in Buddhist literature as a city in the kingdom of Sivi over which king Sivi reigned, and the latter probably with Gauda-grāmā or Gurgaon in the south-east of Panjab which although ending as *gaon* is nevertheless the headquarters of a district.

3. *Grāma* (IV. 2. 142), one of the commonest place-name endings found in the whole of North India.

4. *Kheṭa* (VI. 2. 126), a small hamlet now called *Kherā* and usually applied as a self-sufficient name to

small habitations. Pāṇini says that a wretched city was contemptuously referred to as *Nagara-kheṭa*.

5. *Ghosa* (VI. 2. 85). As pointed out above *ghosa* was a settlement of the cattle-rearing elements in the population and is translated as *ābhīrapallī* by commentators.

6-9. *Kula, Sūda, Sthala, Karsha* (VI. 2. 129). Applied to village names according to Kāśikā. *Sthala* is found in the place-name Kapisthala which is implied as a counter-example in VIII. 3. 91 and is represented by modern Kaithal in Karnal district, still remembered by the local Pandits by its original name. The form *sthalī* is also used as an ending denoting a natural open country or terrain. (IV. 1. 42.)

10-11. *Tīra and Rūpya* (IV. 2. 106). The Kāśikā mentions Kākatīra, Palvalatīra, and Vṛikarūpya, Śivarūya, respectively as examples. We find Kāstīra mentioned as the name of a *nagara* in a sūtra (VI. 1. 155) which is without sufficient reason connected with the Greek word *Kassiteros*, for tin. According to Patañjali Pāṇini's Kāstīra was the name of a Vāhika-grāma (II. 293) which may have been situated on the bank of a stream.

12. *Kachchha* (IV. 2. 126). Place-names ending in *Kachchha* must have been located in the sphere of the *Kachchha* country near the sea-coast from the estuary of the Indus up to the mouth of the Narbada. The Kāśikā mentions Dāru-kachchha and Pippalī-kachchha, the later probably identical with the Rajpipla state occupying the Rewā Kāñthā, near the mouth of the Narbada in the Bombay Presidency.

13-15. *Agni, Vaktra, Garta* (IV. 2. 126). These were used as Uttarapada in forming place-names. The word *Vaktra* may have been found in names situated on the river deltas, e.g., Sindhuvaktra. The name Vibhujāgni mentioned in Kāśikā as an example may be a later illustration but seems to be connected with Bhuj in Kutch. *Garta* appears to have meant a valley as in the

name Trigarta which comprised three mountain valleys.

16. *Palada* (IV. 2. 142), found in such names as Dākshipalada. This word in the Atharvaveda denotes straw (IX. 3. 17) and may have denoted a place in the vicinity of which stumps of various luxuriant weeds and grasses were found.

17. *Arma* (VI. 2. 90). A name for a class of settlements of which some specific names are mentioned by Pāṇini himself (VI. 2. 91), one of which Madrārma connects the same with the Madra country. The word is found in the Taittirāya Brāhmaṇa (III. 4. 1. 9).

18. *Vaha* (IV. 2. 122). It seems to have been common in the Vāhika country. Pīluvaha is mentioned as the name of a place (VI. 3. 121), so called from the presence of the Pīlu trees. The name Phalgunīvaha in Kāśikā may be traced in modern Phagwara.

19. *Hrada* (IV. 2. 142), literally a pool of water; places having such a reservoir were named accordingly, mostly in the region of Kurukshetra.

20. *Prastha* (IV. 2. 122; IV. 2. 110). The names ending in *prastha* were confined mostly to the Kuru country, the region of Kurukshetra in the south-east of the Panjab where *prastha* may still be traced as *pata* in the names of places. The Kāśikā mentions Indra-prastha, Suvarṇapraastha (Sone-pat). Karkīprastha and Mālāprastha are referred to in the sūtras themselves (VI. 2. 87, 88). Other names ending in *prastha* included in the gaṇas Karkyādi and Mālādi may be unimportant places in south-east Panjab, e.g., Karkīprastha (Khekra) and Makrīprastha (Maripat).

21. *Kanthā*. Pāṇini says that *Kanthā* was used with place-names in the Uśīnara country (II. 4. 20) and in the Varṇu Valley (IV. 2. 103). The name Āhvarakantham of a place in the Uśīnara Janapada points to the followers of the Āhvaraka school of the Black Yajurveda who thus appear to have been settled in that part of the country. Some

place-names ending in *Kanthā* are especially mentioned in the Chihaṇādi group (VI. 2. 125) which are all odd names. The word *Kanthā* is traced to the Śāka language where it means "city." (Sten Konow, *Corpus of Kharoshthī Inscriptions*, p. 43, quoting Lüders who traces the word *Kanthā* in Kadhavara of an inscription. Cf. also *JRAS.*, 1934, p. 516, "Here belongs Sogdian *Kanda*-“city,” Saka *Kantha*-“city,” earlier attested in Mārkantha’). The word is known to Pāṇini as of fairly common use in the north-west of India where it must have been adopted in very early times from the language of the Śākas who are mentioned in the inscription of Darius engraved on the Persepolis Tomb as *Saka Para-Daraya*, i.e., the Sakas from beyond the sea, which shows that they were settled somewhere near the Caspian sea. The northern trade route from India leading *via* Oxus to the West must have put Indian traders in contact with the Śākas in very early times, probably sixth century B.C.

*Names of Towns.*—In Pāṇini's scheme the towns in North India fall under two geographical divisions, *viz.*, Udīchyagrāma (IV. 2. 109) and Prāchyagrāma (VII. 3. 14). The towns of the north have again two subdivisions, *viz.*, the Vāhika-grāmas (IV. 2. 117) or the towns in the Vahika country, and the towns in the Uśīnara country which geographically formed part of Vāhika (IV. 2. 118).

That Pāṇini was acquainted with a large number of towns is made clear by his reference to place-names in the seventeen gaṇas enumerated in sūtra IV. 2. 80. Some of these towns were fortified cities, others were trading centres and emporiums for the distribution of merchandise and still others were capital cities of Janapadas or tribes settled in the great hegemony from the Jamna to the Oxus. That ancient India possessed a considerable number of flourishing centres of population in the form of cities or towns is also attested to by the testimony of the Greek writers. According to them Panjab



was full of towns, centres of industry and economic prosperity. Many of these figured as forts or centres of defence such as the famous town of Massaga (Maśakāvati), or Aornos (Varaṇā) in the country of the Aśvakas. The free clan called the Glaukanikoi (identical with the Glauchukāyanakas of the Kāśikā on Pāṇini IV. 3. 99), whose country lay in the fertile and populous regions lying in the south of Kashmir (the Bhimber and BAJAUR districts), between the upper courses of the Jhelum and the Chenab and the Ravi, had as many as thirty-seven cities, the smallest of which contained not fewer than 5,000 inhabitants, while many contained upwards of 10,000. There were also a great many villages which were not less populous than the towns. (M'Crindle, *Invasion of Alexander*, p. 112). Strabo affirms that in the territories of the nine nations situated between the Jhelum and the Beas, such as the Malloi, Oxydrakai and others, there were as many as 500 cities (*ibid.*, p. 112). Megasthenes makes the following general statement on the cities of Mauryan India "Of their cities it is said that the number is so great that it cannot be stated with precision" (M'Crindle's *Megasthenes and Arrian*, p. 209). The above accounts of Greek historians do not seem to suffer from exaggeration as only in the lists attached to the two sūtras, *viz.*, IV. 2. 75, and IV. 2. 80, we have no less than 300 place-names, and these may be further augmented if we add the testimony of the other groups, as those headed by Suvāstu (IV. 2. 77), Varāṇa (IV. 2. 80), Madhu (IV. 2. 86), Utkara (IV. 2. 90), Naḍa (IV. 2. 91), Kattri (IV. 2. 95), Nadī (IV. 2. 97), Kāśi (IV. 2. 116), Dhūma (IV. 2. 127), Karkī (IV. 2. 87), Chihāṇa (IV. 2. 125), etc. This gives us a substantial list comprising about 500 names. The testimony of grammatical literature in this case almost confirms the census recorded by Greek writers. The grammatical evidence is much more valuable as it is only here in the whole range of Sanskrit literature that a vast body of actual place-names has been preserved to us. If

we add to this the names of tribes embodied in the gaṇa lists, such as Aśvādi (IV. 1. 110), many of which were names of well-known *Laukika* gotras, and can be identified with the names of peoples mentioned by Greek writers, the geographical harvest reaped from the *Ashṭādhyāyī* becomes exceptionally rich and pregnant with fruitful results for all future researches in ancient Indian geography. As the work of exploring and laying bare the contents of the numberless mounds, with which the valley of the Indus and of the Panjab rivers and the Gangetic basin are dotted all over, progresses under a scheme of scientific archæology we shall have to fall back upon the Pāṇinian lists and the accounts of Greek writers for recovering the ancient names of those places or sites.

*Place-names in the Sūtras.*—The following names of cities or towns are referred to in the sūtras themselves and are, therefore, of first-rate authority :—

*Kāpiśī* (IV. 2. 99), capital of a province, best known from Pāṇini's time onwards as giving its name to a spirituous liquor distilled from its grape fruits, destroyed by the Achæmenian emperor Cyprus or Kurn in the sixth century B.C., later on repopulated and finally laid into ruins by the Hūṇas, identified as modern Begram about 50 miles north of Kabul); *Saurāstara* (IV. 2. 77, chief city in the valley of the Swat); *Varaṇā* (IV. 2. 82, phonetically connected with the mount Ūṇa, pronounced Ūṇra in Pashtu, identified as Aornos, the natural stronghold near the country of the Assakenoi or Āśvakayanas, and situated a few miles west of the Indus, the supposed Sanskrit restoration of the name by Sir Aurel Stein as *Avarna* should be corrected as *Varaṇā* mentioned as a famous place-name, cf. *ASM.*, No. 42, pp. 89-90); *Vārṇara* (so called from its situation in the Varṇu or Bannu valley, IV. 2. 77, IV. 2. 103); *Śalātura* (IV. 3. 94, situated at a distance of four miles from Ohind on the right bank of Indus, in the northern angle formed by the junction of the Kabul river, modern Lahur, identified as birthplace of Pāṇini);

*Tūdī*, *Varmatī* (Bimran, Masson, *Ariana Antiqua*, p. 69); *Kūchavāra* (IV. 3. 94), perhaps connected with Kucha, the old name of Turkistan appearing in a Sanskrit manuscript from the territory, Lüders, *Zur Geschichte und Gographie Ostturkestans*, p. 246, Varāhamihira mentions the Kūchikas amongst people of the north); *Takshaśilā* (IV. 3. 93, "a great and flourishing city, the greatest, indeed, of all the cities which lay between the Indus and the Hydaspes", *Alexander's Invasion*, p. 92); *Śārkara* (IV. 2. 83), *Sukkur* in Sind on the Indus opposite Rohri seat of a district, cf. Śārkārāḥ, as the name of a people in the list of the Mārkaṇḍeya Purāṇa, p. 373); *Saṅkala* (IV. 2. 75, modern Sangalawala-tiba, Jhung district, a strongly fortified city of the Kathians, McCrindle's *Alexander*, p. 115); *Kāstīra* and *Ajastunda* (VI. 1. 155), the former designated a Vāhika city by Patañjali); *Chihavākantham* (VI. 2. 125, a place-name in the Uśīnara country where the word *Kanthā* taken from the Śāka language was a popular ending); *Ariṣṭhapura* (VI. 2. 100, same as Aritṭhapura, a city of Sivi Kingdom referred to in Buddhist literature); *Gauḍapura* (VI. 2. 100); *Kapisthala* (VIII. 3. 91, modern Kaithal in Karnal district); *Katri* (IV. 2. 95); *Hāstinapura*, *Phalākapura*, *Mārdeyapura* (IV. 2. 101, the last two unidentified); *Paladī* (IV. 2. 110); *Roṇī* (IV. 2. 78); *Śāṅkāśya* (IV. 2. 80, modern Sankisa, situated on the north bank of the river Ikshumatī in Farrukhabad district, the Śāṅkaśyādi group also includes *Kāmpilya*, modern Kampil in Kaimganj Tehsil of Farrukhabad); *Āsandīcat* (VIII. 2. 12; IV. 2. 86, title of the royal city of Janamejaya Pārikshita, in which the horse for his famous sacrifice was bound, *Vedic Index*, I. 72; the Kāśikā equates it with Ahisthala); *Śikhāvala* (IV. 2. 89, name of a nagara according to Kāśikā, phonetically conneted with Sihawal on the left bank of the river Son in Rewa State in Baghelkhand). Pāṇini again refers to Śikhāvala as a proper name (*Danta-Śikhāt samjñāyām*, V. 2. 113). Reference has already been made to the names

of two eastern towns called Mahānagara and Navanagara (VI. 2. 89). The former may perhaps be the same as Mahāsthāna.

*Some Important Names in the Gaṇas.*—There are some ancient place-names included in the gaṇas which can be definitely identified with ancient sites, e.g., *Saunetra*, identical with Sunet in Ludhiana district 3 miles south-west of Ludhiana town, having a large mound and ruins clearly marking the ancient site of an important city which on the basis of coins discovered there Cunningham concluded must have been in existence before the Christian era (*ASR.*, Vol. XIV, p. 65; Pāṇini Saṅkalā-digaṇa); *Śairīshaka* (IV. 2. 80, same as Sirsā, headquarters of a sub-division of the same name in Hissar district, and situated on the north side of a dry bed of the Ghaggar, having considerable ancient ruins lying near the south-west corner of the modern town); *Taushāyana* (Pakshādi group, IV. 2. 80), which may be identified with Tohānā, a place of historical and archæological interest in the Fathabad Tehsil of Hissar district); *Srārastī*, *Vārāṇasī*, *Kauśāmbī*, *Pārā* (IV. 2. 97); *Saubhūta* (IV. 2. 75), which is identified with the kingdom of the Sophytes mentioned by Greek writers, M'Crindle, *Alexander*, p. 280, the men and women of which were noted for their beauty and courage, and which is especially noted by the Greeks for a ferocious breed of dogs remarkable for their size and strength said to have been bred from tigresses, whose fame as M'Crindle has shown had spread to Greece long before Alexander's time (*Ibid.*, p. 364). The tigrine breed of dogs gives a hint to the location of Saubhūta in the Kekaya country or the Salt Range for according to the Rāmāyaṇa (II. 7.00 20) Bharata received from his maternal uncle, the king of the Kaikeyas, presents including "the dogs bred in the palace, gifted with the strength of the tiger and of huge body."

## ADDENDA

महाराज—The word *Mahārāja* referred to in sūtra IV. 3. 97 (महाराजाद्वय्) is taken by Dr. Jayaswal to refer to a republican state [*Hindu Polity*, I. 159]. Their coins found in the Panjab bear the legend *Mahārāja Janapadasa* in Brāhmī or Kharoshthī [Cunningham, *Coins of Ancient India*, p. 69]. Their exact place is not settled, but might have been in the vicinity of the Audumbaras. That it was the name of a Janapada may be taken to be definite.

तैतिल—Pāṇini refers to तैतिल in the compound phrase *Taitila-kadrū* (VI. 2. 42) which probably signified the dappled colour of the Taitila country. Taitila of Pāṇini seems to be identical with Taitala of Kauṭilya which is mentioned in the Arthaśāstra as a place famous for its horses of middle variety (Arthaśāstra, II. 30, p. 133). Dr. Motichandra takes it to be a part of Badkhsan notorious in traveller's tales for its *tittiras* (partridges). The horses of *tittira-kalmāsha* variety referred to in ancient literature seem to be imported from this region.

सरालक—included in the Takshaśilādi gaṇa (IV. 3. 93) appears to be Saharālā in district Ludhiana, known as the original place of a branch of the Agravāla Vaiśyas called सहरालिये. Pāṇini enjoins अञ् suffix in the same sense, सरालकः अभिजनो यस्य स सरालकः ।

ऐयुकारिभक्त—It is mentioned by Pāṇini (IV. 2. 54) as the name of a place inhabited by the Aishukāris, probably a community of bow-makers. The Jaina Uttarādhyayana Sūtra (XIV. 1; S. B. E. XLV. 62) speaks of an ancient, wealthy, famous and beautiful town, named Isukāra after its ruler Isukāra (the Arrow-maker) situated in the Kuru country. [See, Ray Chaudhary, *Political His. of Anc. India*, p. 113; B. C. Law, *India as described in Early*

*Texts of Buddhism and Jainism*, p. 36]. Possibly Hissar retains the traces of the old name Aishukāri.

चक्रवाल—forming part of the gaṇa Sakhyādi (IV. 2. 80) avowedly giving a list of place-names, can be identified with Chakwal in Jhelum district situated on a tributary of the Jhelum.

नड्वल—read in sūtra IV. 2. 88 ( नडशादाङ् डवलच् ) may be the same as Nadol in Marwar. (Cf. *Prithvirājajaya*, X. 50).

भंडु and खंडु—place-names included in the सुवास्त्वादि गण (IV. 2. 77) have been identified by Sylvain Lévi with the two localities named Uṇḍ and Khunḍ near Attock [Journal Asiatique, 1915, p. 73; Journal of the U. P. H. S., December, 1942, p. 37].

रथस्था—mentioned in the Gaṇapāṭha of VI. 1. 157. My suggestion to identify it with Ramgaṅgā finds support from the Mānasa-Khaṇḍa which states that the Ramgaṅgā was also called Rathavāhinī (cf. Aitkinson, Gazetteer of the Himalayan Districts, Vol. II, p. 313, identifying Rathavāhinī with the western Ramgaṅgā; see also कुमार्यु का इतिहास by Pt. Badri Datta Pande, p. 169).







## THE CHAKRADHVAJA FLAG OF INDIA

The design adopted as the National Seal of Free India is taken from the Lion-Capital of the Maurya Emperor Aśoka, who ruled in the 3rd century B.C. This, in a way, connects modern India with the traditions of her glorious past, and the design is doubly welcome as the fruit of the creative genius of one of India's greatest sons, who not only unified the whole country under his benevolent policy, but also was the first emperor in history to conceive the unity of Asia on the widest humanitarian basis.

The original Lion-Capital is now placed in the Sarnath Museum near Banaras. It surmounted a stone pillar raised by Aśoka at the spot hallowed by the Buddha preaching his First Sermon, a place of universal significance in the religious history of Buddhism. The Lion-Capital supported at the top a big Dharamachakra—Wheel of Law, which is a symbol of Buddha's religion and also of the Universal Law that the teachings of the Master typified. Although that symbol no longer exists, the Capital in its present form consisting of four powerfully built lions, seated back to back and placed on a round abacus is a wonderful specimen of design and execution. On its drum are shown four smaller Dharamachakras, alternating with four animals including a bull, a horse, an elephant and a lion. The Dharamachakra on the drum has been adopted as the emblem on India's National Tricolour Flag, which for this reason may suitably be named as the Chakradhvaaja, *i.e.*, "The Wheel-Flag," and this name would be in the traditions of the other ancient flags of India, like the Garudadhvaaja of the Gupta period, the Golden Age of Indian history.

The Lion Capital with its various elements is symbolical of a great idea, *viz.*, the emergence and the

firm establishment of the Rule of Law over Force. The seated lions replete with great energy, represent dominant power, which inheres in the nation, but which stands in need of being harnessed and integrated for achieving universal happiness grounded in righteousness. The four animals on the drum are typical Indian animals, representing different qualities of human character and are drawn as showing great movement, to indicate the principle of dynamic action and energising of the people in their newly awakened condition. The smaller Dharamachakras integrated in the designs of the drum are intended to emphasise in an obvious manner the fundamental unity that underlies the diversity that is characteristic of Indian civilization. The basic note of India's national structure as can be seen through the ages has always been an emphasis on unity and accord transcending the diversity of race, religion, language and culture. The repeated symbol of the four smaller Dharamachakras brings out this basic oneness in a most attractive manner and the artist who conceived of repeating the wheel pattern to alternate with the different animals deserves the highest praise for visualising a great idea and executing it with consummate skill.

Victory to the Great Chakradhvaja Flag of India!

—V. S. AGRAWALA



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**THE  
JAGANNATHA OF ORISSA**  
**By**  
**Harekrushna Mahtab**

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## The Cult of Jagannātha

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The religious life of Orissa is inextricably bound up with Jagannātha of Puri. For the people of Orissa Jagannātha is the manifestation of the Supreme Being. There have been from time to time revolutionary changes in the popular religion of the country; Buddhism, Jainism, Śaivism and Vaiṣṇavism all have exercised a strong influence on the religious beliefs of the people. Sometimes royal patronage has lent support to one particular cult or another, but the glory of Jagannātha continues undiminished as ever. The history of the religion of the Oriya people is, so to speak, the history of Jagannātha.

The origin of Jagannātha worship is shrouded in mystery. Some scholars trace it to the Jaina or Buddhistic sources while others are inclined to ascribe it to the philosophy of Vaiṣṇavism. According to Prof. P. Mukharji, Jagannātha was from the very beginning conceived as Kṛṣṇa-Vāsudeva who was worshipped along with his brother Balarāma-Saṅkarshaṇa. Later with the spread of Sāṅkhya philosophy when every god was associated with a female deity as his Śakti Subhadrā found a place with Kṛṣṇa-Vāsudeva and Balarāma-Saṅkarshaṇa. In support of his view the learned Professor quotes Utkala Khaṇḍa of the Skanda Purāṇa where Subhadrā is said to be "both his (Jagannātha's) sister and wife" (तस्य शक्तिः स्वरूपेयं भगिनो स्त्रीप्रवर्त्तिका) and says that 'she is but another embodiment of Lakshmi.' He thinks that Jagannātha-worship began sometime before the Christian era.

Late Mahāmahopādhyāya Sadāśiva Miśra also in his work '*Sri Jagannātha Devera Mandira*' has made an attempt to establish that the origin of Jagannātha worship lies in Brāhmanism.

There are three strong reasons for not accepting these views. First, the name of Jagannātha for Kṛṣṇa-Vāsudeva; second, the image of Jagannātha which is so very unlike any other deity of Brāhmanism and third, the existence of Subhadrā between Jagannātha and Baladhadrā.

Jagannātha (Lord of the Universe) is an attribute of Viṣṇu and Jagannātha has been used as another name for Viṣṇu, but nowhere in the ancient scriptures has Jagannātha been spoken of

as one of the manifestations of Vishṇu. It is beyond our comprehension how the name of Kṛishṇa-Vāsudeva was replaced by that of Jagannātha. As regards the image of Jagannātha it is an uncouth figure having nothing in common with the image of Kṛishṇa-Vāsudeva. It is not at all artistic while its significance is not easily understood. The conception that led to the production of the strange images of Jagannātha, Balabhadra and Subhadrā has to be traced. Nowhere is Kṛishṇa-Vāsudeva known as Jagannātha. Jagannātha is not mentioned as one of the Avatāras in any of our religious works. Prof. Mukharji and those who think that Jagannātha was originally conceived as Kṛishṇa-Vāsudeva do not explain how the name of Kṛishṇa-Vāsudeva was changed into Jagannātha. It has been suggested that the Śavaras who thought of gods as horrible beings worshipped this image which later came to be known as Kṛishṇa-Vāsudeva. If this view is accepted, it has to be admitted that the Śavaras worshipped some other deity than Kṛishṇa-Vāsudeva. Thus it is clear that Jagannātha did not originate with Kṛishṇa-Vāsudeva and there is no reason to connect the worship of Kṛishṇa-Vāsudeva with the Śavaras.

(Śāṅkhya philosophy had been evolved sometime before the advent of Buddha but the conception of Purusha and Prakṛiti based on that philosophy did not spread till the 8th or the 9th century A.D. It was after this that every god was associated with his Śakti who was taken to be his wife. Nowhere else has the sister of any deity in the Hindu pantheon been conceived as his Śakti. The worship of Kṛishṇa-Vāsudeva was in vogue in different parts of India but nowhere was he known under the name of Jagannātha nor did Subhadrā find a place along with him. Barāhamihira (5th Century A.D.) in his *Bṛihat Samhita* says that between the images of Baladeva and Kṛishṇa the image of the goddess Ekāṇaṁśā should be placed. But in the Purāṇas that have referred to Kṛishṇa-Vāsudeva and Baladeva no mention of Ekāṇaṁśā has been made. The description of Ekāṇaṁśā as given by Barāhamihira does not in the least agree with the image of Subhadrā. So it is evident that Ekāṇaṁśā has nothing to do with Subhadrā. Nor is Subhadrā a product of the influence of Śāṅkhya philosophy. The *Utkala Khanda* which has been quoted by Prof. Mukharji has only made an attempt to establish that every god including Jagannātha is associated with his Śakti but it has found it impossible to deny that Subhadrā is regarded as the sister of Jagannātha. )

# PLATE. XXXI.

# SYMBOLS OF BUDDHA.

FIG. 1

N.GATE. NO. 2 TOPE

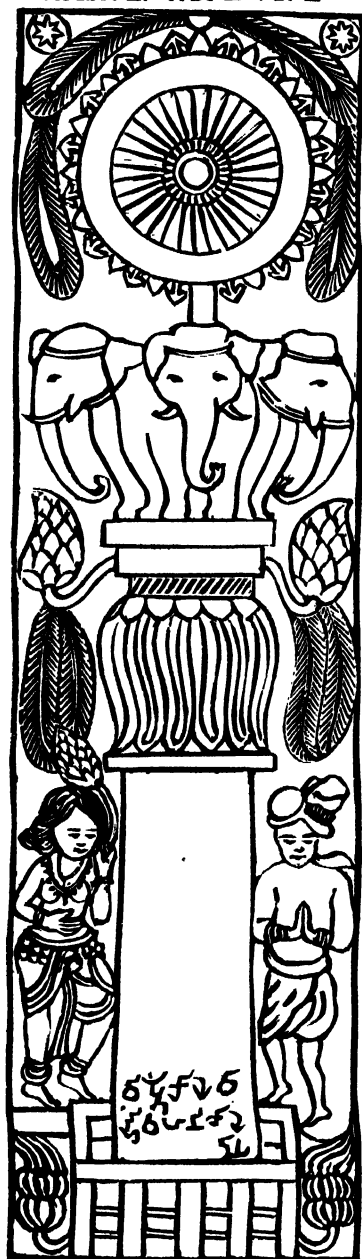
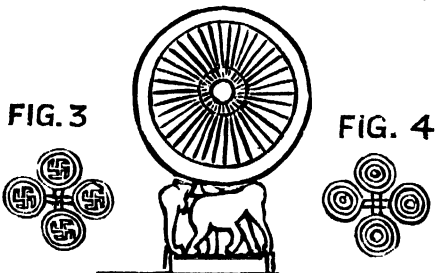


FIG. 2

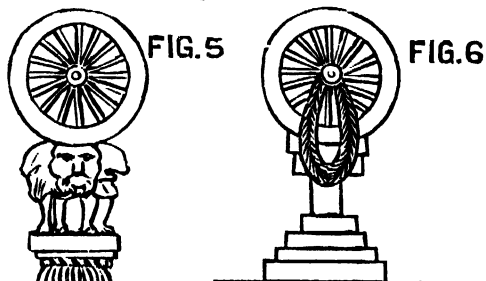
SUMMIT OF GATEWAY. NO. 1 TOPE.



S.GATE. NO.2 TOPE.

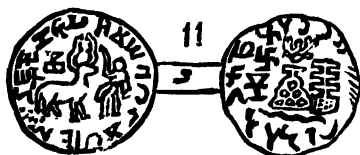
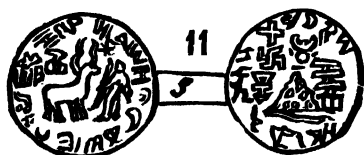
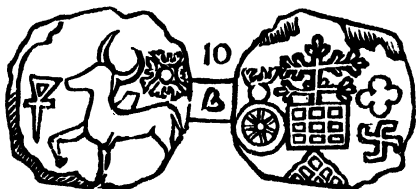
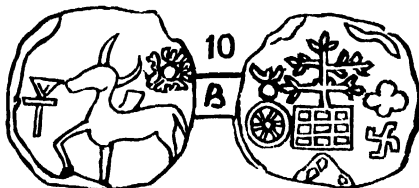
S.GATE. NO.3 TOPE.

EAST GATE NO.2 TOPE



EMBLEM OF SURYA  
UDAYGIRI

FIG. 7



Symbols of the Jagannatha Cult



PLATE XXXII. SYMBOLS OF DHARMA.

FIG. 5



FIG. 1

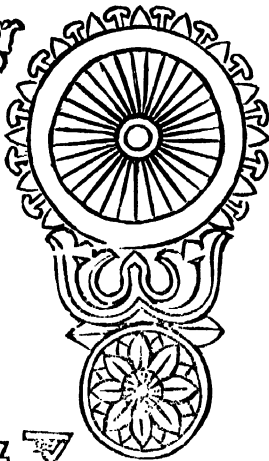


FIG. 3

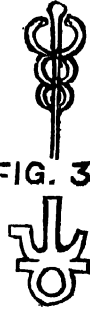


FIG. 2

FIG. 4

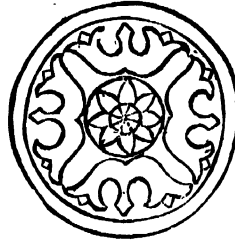


FIG. 7



FIG. 6



FIG. 8

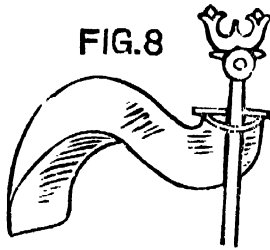


FIG. 9

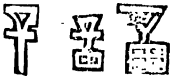


FIG. 15



FIG. 10

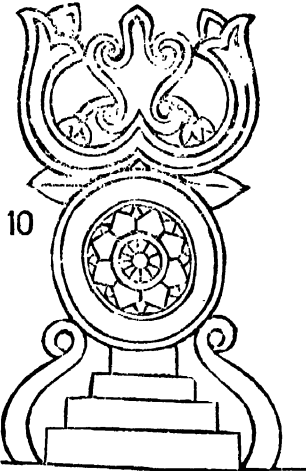
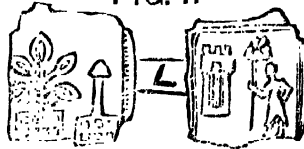


FIG. 11



13



14



16



17



18



19



20



FIG. 23

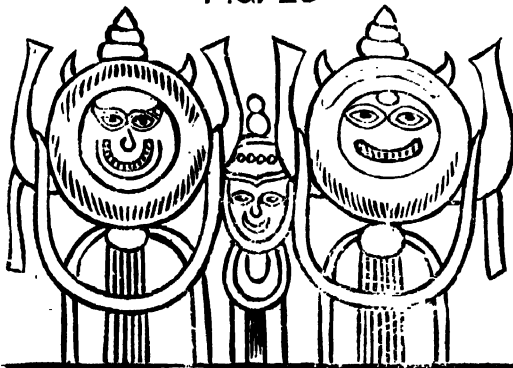
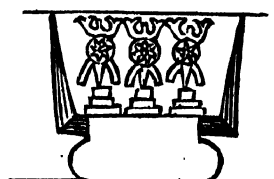


FIG. 21



FIG. 22



JAGANNATH

Symbols of the Jagannatha Cult

Sāralādasa (15th century) in the Vanaparva and the Virāṭa parva of his *Mahabharata* describes Subhadra to be identical with the masculine deity Brahmā, the Creator.

Let us analyse all these facts closely with a view to finding a solution to the problem.

In the Vedas Viṣṇu has been described as the Supreme Being of all-pervading presence (तद् विष्णोः परम पदम्). It is difficult to say when Kṛishṇa-Vāsudeva came to be regarded as an incarnation of Viṣṇu; but the worship of Kṛishṇa-Vāsudeva is undoubtedly pretty old. In the Buddhist book 'Niddesa' which is in Pāli there is mention of the worship of Vāsudeva and Balabhadra. In an inscription which is believed to be of the second century and which has been discovered at Gosuṇḍi in Rajaputānā mention has been made of the worship of Saṅkarshana and Vāsudeva. (The Vidiśa (Besnagara) inscription refers to the Greek named Heliodoros who was sent as an ambassador to the court of Kāśīputra Bhāgabhadra and who became a convert to Vaiṣṇavism. In his zeal for the new faith he erected a Garuḍa-dhvaja in honour of Vāsudeva-Kṛishṇa and called himself a Bhāgavata. So it is definitely known that the worship of Kṛishṇa-Vāsudeva (the cult of Bhāgavata) had penetrated into North-western India by the second century B.C. when the Greeks came under its influence. In one of the inscriptions of Nānāghāt caves the names of Saṅkarshana and Vāsudeva find mention. Meghasthenes in his accounts of India states that the worship of Vāsudeva-Kṛishṇa had been introduced in Muttra on the banks of the Yamunā. Thus it is clear that the worship of Kṛishṇa-Vāsudeva had been in vogue before the Mauryas. R. G. Bhandarkar conjectures that the philosophy of the Upanishads gave rise to Buddhism and Jainism in Eastern India and to the worship of Kṛishṇa-Vāsudeva in Western India, almost contemporaneously. The cult of Bhāgavata was prevalent among the Sātvatas also. Bulher is of opinion that the worship of Kṛishṇa-Vāsudeva may be traced back to the 6th century B.C. Baudhāyana (5th century B.C.) and Paṇini (8th century B.C.) both refer to the worship of Kṛishṇa-Vāsudeva. Thus it is evident that the worship of Vāsudeva began not later than the 8th century B.C.

Kṛishṇa-Vāsudeva who was worshipped by the followers of the Bhāgavata cult had no connection with Gopāla-Kṛishṇa of Muttra and Brindāvana. It is in Harivaṃśa (3rd century A.D.) that we find the first identification of Kṛishṇa-Vāsudeva with

Gopāla-Kṛṣṇa. Even then Rādhā had no place with Kṛṣṇa as described in Harivaṁśa. In the Bhāgavata which was composed a long period after Harivaṁśa there is no mention of Rādhā. Vaiṣṇavism had spread all over India under the influence of the Gupta emperors from the 4th century onward. In the meanwhile in the 9th century Śāṅkarācārya gave an impetus to Śaivism and Advaita philosophy. A fresh impetus was imparted to Vaiṣṇavism in the 11th and 12th centuries by Rāmānuja and Mādhvācārya respectively. Rāmānuja laid stress on the worship of Nārāyaṇa while Mādhvācārya laid stress on the worship of Viṣṇu, but neither of them advocated the worship of Kṛṣṇa-Vāsudeva or Gopāla-Kṛṣṇa. It was Nimbārka, a Brāhmin of Āṇḍhra country who first introduced Rādhā as a companion of Kṛṣṇa, but he assigned as high a place to Rukmiṇī, a consort of Kṛṣṇa as to Rādhā. By that time Kṛṣṇa-Vāsudeva had been totally eclipsed by Gopāla-Kṛṣṇa. Jayadeva (12th century) in his *Gītagovinda* raised the love of Rādhā and Kṛṣṇa to such heights that Kṛṣṇa-Vāsudeva completely vanished from popular worship.

From the above discussions it will be clear that at no time was Subhadrā worshipped as the Śakti of Kṛṣṇa-Vāsudeva from the beginning of the worship of Kṛṣṇa-Vāsudeva till its supplantation by that of Gopāla-Kṛṣṇa. There is, therefore, absolutely no reason to identify Jagannātha with Kṛṣṇa-Vāsudeva.

We can plausibly account for the name of Jagannātha and the existence of Subhadra with him in the following manner.

There were three images in very ancient times. The chief of them was known as Jagannātha and the image between the two was considered as a female deity. It was further conceived that she was the sister of the other two. When the worship of Kṛṣṇa-Vāsudeva was gaining ground in the eastern and southern India, the image of Jagannātha which had been in existence for a very long time was taken to stand for Kṛṣṇa and the other male deity as a matter of course, was called Balarāma and the female deity who had been considered as the sister of the two was called Subhadrā. It is likely that at the time when Jagannātha was considered to stand for Kṛṣṇa, a Śakti for each god had not been conceived. But by the time when a female deity was considered as the Śakti of each god, the name of Jagannātha had been so firmly established that it was not possible to change it into

any other. Thus the names of the deities remained as Jagannātha, Balabhadra and Subhadra.

Let us now consider what these three images were before Jagannātha was taken to stand for Kṛishṇa.

Though religious beliefs were based on different schools of philosophy they were nevertheless interrelated; consequently Brāhmanism, Buddhism, and Jainism were not different religions in the same sense as Hinduism and Islam. All these three religions were like the different branches of the same tree. So we have to bear in mind that none of them supplanted the other. Only they flourished side by side; sometimes one had the ascendancy and sometimes another. There are evidences which show that kings following Brāhmanism donated grants to Buddhists and Jainas and also Buddhist or Jaina rulers gave lands to Brāhmins. So there was harmony and concord and no enmity among these religions.

In the 5th century B.C. during the rule of the Nandas, Brāhmanism seems to have been the popular religion in Orissa for the Nanda kings followed it. What was the religion of the successors of the Nandas in Orissa is not known to us; but it can be said without any fear of contradiction that Jainism and Buddhism spread in Orissa during this period. After the conquest of Orissa by Aśoka in the third century B.C. Buddhism made rapid strides in Orissa. Aśoka's personal religion was Buddhism and the royal religion must have influenced the people. He undertook special measures for the moral uplift of the masses by appointing what may be called ministers of morals (Dharma Mahāmāntas). From Asoka's inscriptions it is gathered that he particularly instructed his officers to make the wild tribes (the Āṭavikas) religious-minded. Of course Aśoka's Dharma was based on the principles of non-violence and sanctity of life and thus the foundation was laid for the spread of Buddhism among them. That the wild tribes formed the majority of the inhabitants of Orissa of those days is known from Pāli books and from contemporary historical records. Their descendants are still living in the Māl areas of Ganjam and Koraput districts and in their neighbourhood.

In the 2nd century B.C. when Khāravela ruled over Orissa Jainism came to be the royal religion. Though he performed a Rājasūya Yajña according to the Vedic rites he was a staunch

Jaina and took effective measures for its propagation. Again in the third century A.D., Tosālī appears to have become a famous centre of Buddhists. The Guptas were Vaishṇavas and naturally they patronised Vaishṇavism in Orissa during their rule. The Māṭhara kings (4th and 5th century A.D.) called themselves 'Parama Daivata' which shows that they followed Brāhmanism, but the Vāśishṭhas who succeeded them were Vaishṇavas, for they called themselves 'Parama Bhāgavatas'. The Śailodbhavas who came after the Vāśishṭhas were at first followers of Brāhmanism but later they became Śaivites. Towards the close of the Śailodbhava rule, Śaśanka, the king of Kārṇasuvarṇa, conquered Kaṅgoda and he was an enemy of Buddhism. Under him the Buddhists were badly persecuted. The atrocities committed by him on the Buddhists have been recorded by Hiuen Tsang in his accounts from which we also know that Odra portion of Orissa was Buddhist while in Kālīṅga and Kaṅgoda Buddhism had lost its hold.

In Harsha Buddhism found a strong supporter in Kaṅgoda. The Gaṅgas of Kālīṅga who ruled as contemporaries of the Śailodbhavas were Śaivites. The Karas or the Bhaumas supported Buddhism and under them Buddhism reached the height of its glory in Orissa. But there are evidences to show that Vaishṇavism and Śaivism were also prevalent. Tribhuvana Mahādevī calls herself 'Parama Vaishṇavī'; Subhākaradeva calls himself 'Māheśvara.' Some of the vassal kings of the Tuṅga dynasty styled themselves 'Māhesvara'. Subhakaradeva III, at the request of Vinīta Tuṅga donated a village for the worship of Buddha Bhaṭṭaraka while Vinīta Tuṅga himself was a Śaiva and called himself 'Māheśvara'.

From the foregoing accounts it would be clearly known that it was a time when there was an attempt on the part of Brāhmanism to absorb the declining Buddhism in its fold while Buddhism was also making efforts to retain its identity by taking in a part of Brāhmanism, viz., Tāntrikism. From the Buddhistic ruins discovered at Udayagiri, Lalitagiri and Baudh we find traces of the influence of Tantra cult in those days. It has to be borne in mind that this influence was not confined to Buddhism alone. Śaivism and Vaishṇavism also were influenced by it. In the 6th century A.D., Nāgārjuna who was versed in Mayūravidyā preached his Sūnyavāda or the doctrine of the Void in Orissa. In the 7th century A.D. Mañjuśrī, Bodhisrī and Chandragomi preached the Nāgāntaka school of Buddhistic philosophy in Orissa. Mayūravidyā was

based on Tantra and it is known from the *Sūnyasamhitā* of Achyutānanda Dāsa (16th century) that Nāgāntaka and Yogāntaka schools of philosophy ultimately resulted in Tāntrikism. When Buddhism, Śaivism and Vaiṣṇavism were all strongly influenced by Tāntrikism they tended to lose their separate identities.

In the 8th century A.D. under the kings of the Keśarī dynasty Buddhism declined and Brāhmanism had the ascendancy. Śaṅkarāchārya in the 9th century came to Orissa and established the Bhogavarddhana or Gobarddhana Maṭha at Purī. Though the Keśarīs were mainly Śūvites, Vaiṣṇavism was also spreading steadily. The twin temple at Gandharādi in Baudh is a typical specimen of the religious compromise between Śaivism and Vaiṣṇavism. These two temples are adjacent to each other and are constructed in the same style; but in one of them is installed Nīlamādhava (Vishṇu) and in the other Siddheśvara (Śiva). With the decline of the Keśarīs, Śaivism also declined and there was the rise of Vaiṣṇavism. By the twelfth century, Vaiṣṇavism had occupied a position which was unassailable.

Kṛishṇāchārya, one of the authors of *Bauddha-Gāna-O-Dohā* belonged to the Vajrayāna school. Some scholars identify Vajrayāna of Buddhism with Sahaja Yāna of Vaiṣṇavism. There is in Bengal a sect of Vaiṣṇavas known as Sahajā for their following the Sahaja Yāna doctrine. It has already been said that Tantra and Yoga had become a common feature of both Buddhism and Brāhmanism before Brāhmanism could absorb Buddhism in its fold. So it is idle to speculate whether Sahajā cult was a part of Buddhism or of Vaiṣṇavism. There is no doubt that both Brāhmanism and Buddhism had contributed to give rise to this Sahajā cult. There is greater likelihood that Sahaja Yāna came into being under the influence of Vaiṣṇavism on Buddhism. At the same time Tāntrikism had also deteriorated to a very low degree. Tāntrikism combined with Sahaja Yāna resulted in the grossest forms of immorality and satisfaction of lust came to be regarded as a virtue. It is probable that the representations of amorous figures on the walls of temples in Orissa are due to the prevalence of this philosophy of satisfaction of lust.

Mantrayāna or Vajrayāna which prevailed in the eighth and ninth centuries was only a branch of Buddhism. It was a worst form of Tāntrikism. Sir Charles Eliot in his work 'Hinduism and Buddhism' has shown that in Mantra Yāna or Vajrayāna the

worst forms of conduct in Hinduism have been cleverly mixed up with Buddhism.

A branch of Vajrayāna was Vāmāchāra, which advocated the satisfaction of sexual appetite. Among the followers of Vajrayāna and Vāmāchāra eighty-four persons are known to have become famous. They are known as Siddhas (सिद्ध). Some of these Siddhas undoubtedly belonged to Orissa. From the Mahābhārata of Śāralādāsa it is learnt that Gorakhanātha, one of the Siddhas was regarded as a god in Orissa. The present Yogis are the remnants of Gorakhanātha's followers.

In the philosophical works of the Nāthas which are in Sanskrit outward forms of worship of gods are considered to be unnecessary. The attainment of god within the physical body is stressed upon. Study of the Vedas and pilgrimages to holy places are equally condemned. That the influence of these different religious currents and cross-currents was strongly felt in Orissa cannot be gainsaid.

Under Chodagaṅgadeva (12th Century) Vaishṇavism was firmly rooted in Orissa. Rāmānuja came to Purī sometime between 1122 and 1137 A.D. and gave a strong impetus to Vaishṇavism. The temple of Alāranātha at Brahmagiri in the Purī district was constructed about this time. The image of Viṣṇu along with those of Lakṣmī, Rukmiṇī and Sarasvatī is worshipped there. Rāmānuja tried to bring about certain changes in the worship of Jagannātha but there was severe opposition. Jagannātha came to be regarded as an incarnation of Viṣṇu but a separate temple was constructed in the compound of the temple of Jagannātha to instal Lakṣmī, the consort of Viṣṇu.

In the twelfth century also Jayadeva came to Puri and preached the cult of Love of Rādhā and Kṛishṇa; but it took long three hundred years till the coming of Sri Chaitanya for this cult to be firmly rooted in the Orissan soil.

The thirteenth century witnessed the activities of Narasiṅha Muni, Narahari Tīrtha and Jagannātha Tīrtha who preached Vaishṇavism in Orissa. In the fourteenth century Narasiṅha Bhārati, Vāsudeva Bhārati and Rāghava preached Vaishṇavism of Mādhvachārya school. During the rule of the Gaṅga Kings particularly from Anāṅgabhimadeva III religious teachers of Mādhvachārya school preached Vaishṇavism under royal patronage.

The temple of the Sun-god at Konārka was built in the fifteenth century. Sun worship had been in vogue even from the Vedic age. In course of time the Sun was identified with Vishṇu. With this identification certain ceremonies connected with the Sun worship were transferred to the worship of Krishṇa-Vāsudeva. Tribikrama (the Dwarf incarnation of Vishṇu) is also another name for the sun. It has to be remembered that the worship of Vishṇu is almost as old as the Sun worship. It is difficult to say with any certainty when Sun worship was introduced in Orissa, but from the existence of an image of the sun on a chariot drawn by four horses in the Ananta cave which was excavated in the second century B.C. some scholars are inclined to believe that Sun worship was a part of Vishṇu worship even in the second century B.C. But such a conclusion from an isolated representation is hazardous and cannot be relied upon.

It is quite probable that during the Keśarī kings sun worship was introduced into Orissa. There is the representation of the Sun-god drawn by four horses on one of the walls in the compound of the Liṅgarāja temple at Bhuvaneśvara. There are traces of Sun worship at Jajpur. There were pillars with Garuḍa seated on them, but they have been damaged or destroyed by the Muhammedan conquerors. On the steps leading from the Varāhanāth temple to the banks of the Vaitaraṇī there is a representation of the Sun-god drawn by seven horses. It is said that Purandara Keśarī repaired the temple of the Sun at Konārka. There is a pillar called the Garuḍa pillar inside the temple of Jagannātha. Sun worship reached its zenith in Orissa when Narasiṅhadeva constructed the Sun temple at Konārka which is known as the Black Pagoda to the Western world.

There was a time when the Sun-god at Konārka elicited great reverence like Jagannātha of Puri. Though the Sun worship had been known from the Vedic times it was with the immigration of the Magas of Persia that Sun-worship found popular favour in India. The Magas were Sun-worshippers. Besides the Magas of Persia another race also called the Magas of Śākadvīpa confirmed the Sun worship in India. Of the latter Magas there is a tradition that Śāmba, the son of Krishṇa was cursed by his father to be afflicted with leprosy whereupon he worshipped Mitra, i.e., the Sun to recover from the fell disease. The Sun god advised him to invite some Maga Brāhmanas of Śākadvīpa for his worship. Among the Maga Brāhmanas there was a sect called the 'Konas'



and another called the 'Arkas.' The name of Koṇārka originated from the names of these two sects of Brahmins. But Sārālādāsa in the Vana Parva of his Mahābhārata says that Sūryanārāyaṇa killed the demon 'Arka' at the place which came to be known as Koṇārka and where Śāmba cursed by his father worshipped the Sun god. We are not inclined to attach much importance to these traditions. With the spread of Vaiṣṇavism from the 8th century onward incarnations like Kurma (Tortoise) Varāha (Boar), Nṛsiṃha (Man-Lion) etc. came to be worshipped. Similarly the worship of the Sun gradually spread till it reached its high water mark when Narasiṃhadeva built the temple of the Sun-god at Koṇārka

There is nothing in Orissa to show how the worship of Kṛiṣṇa-Vāsudeva gradually lost itself in the worship of Gopāla-Kṛiṣṇa which ultimately culminated in that of Rādhā-Kṛiṣṇa except that there is a tradition that Narasiṃhadeva I built a temple at Remuṇā and it was dedicated to Madanmohana. If Jagannātha had been established from the very beginning as Kṛiṣṇa-Vāsudeva the identification of Kṛiṣṇa-Vāsudeva with Gopāla Kṛiṣṇa and subsequently his association with Rādhā must have found expression in Jagannātha and in the forms of his worship. Uptil the end of the 14th century there is no trace of these changes in Orissa except that Baladeva and Subhadṛā were seated with Jagannātha in the same temple.

Jagannātha has been described as Viṣṇu in a copper-plate grant of Narasiṃhadeva IV. In the same copper-plate is mentioned that Gaṅgeśvaradeva had constructed the temple of Jagannātha. Narasiṃhadeva flourished in the fourteenth century and by that time in other parts of India Gopāla-Kṛiṣṇa had totally eclipsed Kṛiṣṇa-Vāsudeva and the cult of Love of Rādhā and Kṛiṣṇa had obtained a firm footing. But this cult seems to have been completely unknown to Orissa till the middle of the 15th century.

In the Mahābhārata of Sārālādāsa we find references to the love of Kṛiṣṇa for the Gopīs; but this love has not been given so high a place as in the Vaiṣṇavite literature which followed Sārālādāsa's Mahābhārata. The *Gitaḡovinda* of Jayadeva found an echo in the famous songs of Vidyāpati and Chandidāsa of Bengal who eulogised the love of Rādhā and Kṛiṣṇa. The current of this cult of Love flowed into Orissa when Kapilendradeva (1436-1466 A.D.) introduced the *Gitaḡovinda* to be sung in the temple of Jagannātha.

Purushottamdeva who succeeded Kapilendradeva is known to have made grants of land to one Poteśvarabhaṭṭa in which he solicited the blessings of Madangopala installed at Remuṇā. It was Purushottamadeva also who brought the image of Sakshi-gopāla from Kañchi and installed it in his palace. But till the reign of Purushottamdeva there was no worship of Rādhā along with Kṛishṇa.

( Sṛī Chaitanya came to Orissa in 1509 A.D. and stayed there for 15 years during the reign of Pratāparudradeva who succeeded Purushottamadeva.) Among the aristocrats, particularly among the courtiers of Orissa the works of Vidyāpati and Chāṇḍīdāsa had been very popular. Rāmānanda Rāya, the Governor of the Deccan territory of Orissa was imbued with the spirit of the new cult of Love and his exposition of the philosophy of love before Sṛī Chaitanya has been described in *Chaitanya Charitamrita*. He was so much absorbed in religious meditations that he proved a failure as a governor and ultimately resigned his post to devote himself entirely to religion based on the philosophy of love. It is said that he had memorised all the works of Vidyāpati and Chāṇḍīdāsa. Thus the field had been prepared for the propagation of the cult of love and with the advent of Sṛī Chaitanya the cult of Love easily found favour with the people.

Contemporary literature of the period shows that Sṛī Chaitanya's cult of love captivated the minds of the people of the upper classes only, but the common people still thought that Jagannātha was the be-all and end-all in religious life. So there was a struggle but in course of time Vaishṇavism as propounded by Sṛī Chaitanya came to be the religion of the masses.

Some scholars think that a tooth of Lord Buddha is preserved in the image of Jagannātha. This belief is based on an account given in Dāṭhā Dhātu Vamśa by Dharmakīrtti. In the first place Dāṭhā Dhātu Vamśa is not a historical record and secondly the story of the tooth relic does not fit in with that of Jagannātha. It rather indicates that the tooth was taken away for good to Ceylon.

There are different traditions relating to the origin of Jagannātha. One of them runs as follows.

When Lord Sṛīkṛishṇa left the world his earthly remains were placed on the funeral pyre but the navel portion could not be consumed by fire. So it was floated in the sea. It reached Nīlāchala. At this time King Indradyumna was practising austerities

to have a view of Viṣṇu, who appeared before him in a vision and ordered him to place this navel portion in a wooden image and worship it as Viṣṇu. Brāhmanism does not advocate the worship of any part of the dead body as Buddhism does. This tradition simply indicates that some Buddhistic story had been later medelled to give it a Brāhmanic appearance.

Nīlāmbaradāsa (15th century) describes the construction of the temple of Jagannātha in his *Deulatola* in the following manner.

Nārada informed (Indradyumna), king of Mālava that Nīla-Mādhava was on the shore of the Eastern Sea. Indradyumna deputed his minister Vidyāpati to enquire after Nīla-Mādhava. Vidyāpati came to Nīlachalā and learnt that a Śavara, Viśvāvasu by name had secreted Nīlamādhava and allowed no one else to visit the deity. Vidyāpati managed to get himself admitted as a guest into Viśvāvasu's palace where he fell in love with his daughter. With her help Vidyāpati found out where Nīla-Mādhava was and sent word to Indradyumna who proceeded to Orissa with a huge army. Viśvāvasu met Indradyumna at Charchikā near Bāṅki and submitted to him. They became friends, but in the meantime Nīla-Mādhava had vanished. Indradyumna gave up food and practised severe austerities for 21 days after which a divine voice told him in a dream that Nīla-Mādhava had taken the form of a Dāru (a log of wood) and was floating in the sea. He was further advised to get the image of Nīla-Mādhava made out of this Dāru and worship it. Viśvakarmā, the divine architect appeared before King Indradyumna in the guise of an old carpenter and undertook the construction of the image on condition that the doors of the room where he would work must remain closed for a fixed period. The work went on but after some days, Gundīchā, the queen of Indradyumna got curious and caused the doors to be opened. It was found that the old carpenter had vanished and there were the three half-done images. These images are still being worshipped.

The following version of the story of Jagannātha is to be found in the Vana Parva and Mushali Parva of Saralādāsa's *Mahabharata*. When Lord Śrī Kṛṣṇa was killed by the arrow of Jārā, a fowler, Arjuna tried to consume the dead body in flames, but he failed to do so. Consequently it was thrown into the sea and at length it floated in the form of a Dāru (a log of wood) to

Nilasundara on the shores of the sea. Jārā had followed the dead body along the sea coast. Indradyumna, son of king Gālamādhava constructed a temple and installed the images constructed by Viśvakarmā in disguise. In this version also the uncouth figures are ascribed to the opening of the doors before the stipulated period.

There are various traditions pertaining to Jagannātha and these are to be found in the Utkala Khanda of Skanda Purāṇa, Brahma Purāṇa, Nārada Purāṇa, Padma Purāṇa, Kapila Saṃhitā, Nīlādri Mahodaya as well as in ancient works in Oriya, Bengali and Telugu. The substance of all these traditions is the same, *viz*, that Jagannātha was being worshipped by a Śavara and Indradyumna subsequently installed him in a temple. In the Bauddha-Gāna-O-Dohā (8th century) which has been edited by Mahāmahopādhyāya Haraprasād Śāstrī there is mention of king Indrabhūti whom Pandit Binayak Misra identifies with Indradyumna of these traditions. But Indrabhūti was the king of Uddiāna in the early eighth century. M'n. H. P. Sastri identifies Uddiāna with Orissa, while other scholars do not accept this view and hold that Uddiāna was somewhere in Assam or Bengal.

Indrabhūti was a disciple of Anaṅgavajra and he was a learned scholar in Vajrayāna. He was the author of Jñāna Siddhi and Kuru-kulla Sādhana. His sister, Lakshminīkarā (729 A.D.) also made a special study of Vajrayāna. Even if Uddiāna was a part of Orissa, the line of kings to which Indrabhūti belonged cannot be ascertained. Historical materials discovered upto now are silent about Indrabhūti. More light may be thrown on Indrabhūti and his kingdom, Uddiāna when the Tibetan sources are thoroughly explored. Pandit Bināyaka Misra thinks that the connection of Jagannātha with Indradyumna and the Śavaras is very old. The name of Indradyumna does not find mention in any of the records about the kings of Mālava. So we find it really very difficult to explain the connection between Indradyumna and Jagannātha.

(Sir A. Cunningham makes the following observation in his book THE STUPA OF BHARHUT pages 112-113:—

### 3-Tri-Ratna Symbol.

The principal Buddhist symbol is the Tri-Ratna, or 'Tripal Gem' Symbol, which is found in all the countries wherever Buddhism

is prevailed. Mr. Beal calls this "the sacred Symbol of the MANI, or threefold gem, indicating the all supreme Buddha," and in another place he described the Symbol as "the triple object of their veneration, Buddha, the Law, and the Church." This triple Symbol was a very favourite form of ornament for the pinnacle of gateway, or the earrings of a lady, and for the point of a military standard, of the centre piece of a necklace. In the Bharhut Sculptures the Tri-Ratna Symbol is placed above the thrones of the Buddhas Vishwabhu, and Sakya Muni.

Considerable interest attaches to the Symbol of the Tri-Ratna, as there can be no reasonable doubt that the three rude figures of Jagannātha, and his sister, and brother, now worshipped with so much fervour in Orissa, have been directly derived from three of these Symbols. I was first led to this opinion in 1851, by the Discovery of three of these Symbols set up together in one of the Sanchi Sculptures. Since then I have found these same three rude Jagannātha figures are used in all the Native Almanacs of Mathurā and Benares as the representative of Buddha in the Buddha Avatāra of Vishnu. This last fact seems to me to be conclusive but I may add that the Jagannātha figure in Orissa is universally believed to contain a bone of Kṛishṇa. But as Brahmans do not worship the relics of their gods I conclude that this bone must be a relic of Buddha, and that the rude figure of Jagannātha in which it is contained is one of the old Tri-Ratna, or "Triple-gem" Symbols, of the Buddhist Triad.

The able reviewer of Mr. Fergusson's "Trees and Serpent Worship" remarks that "one of the general Cunningham's happiest hits is his derivation of the three fetish-like figures of Jagannātha and his sister and brother, from three of the combined emblems of the Buddhistic Trinity, placed side by side as at Sanchi." "The resemblance" he adds, "is rude but unmistakable."

The same learned author has also dealt with the Symbols of Buddha, Dharma and Sangha in his book "The Bhilsa Topes". Mr. Cunningham observes:—

7. *Dharma*, or Concrete Nature, was, I believe neatly symbolised by a monogram which united the radical letters of the various elements of matter. According to the *Puja-Khanda*, all things with their Vija-Mantras (radicals), came from *Swabhava* (the self existent), in this order :

From the <i>vija</i> of the letter	Y, air
From that of the letter	R, fire



A Stone with Triratna Symbols Discovered  
At Bhubaneswar and Preserved in  
ASUTOSH MUSEUM, CALCUTTA.



From that of the letter	V, water
From that of the letter	L, earth
From that of the letter	S, Mount Sumeru.

Now it is curious that the old Pali equivalents of these letters form when combined together, a monogram of exactly the same shape as the symbol which I have attributed to Dharma. In plate XXXII, fig. 3, I have given this monogram, with the single letters which compose it placed in a line below. In all the monograms, both of the bas-reliefs and on the coins, the symbol is crossed by a horizontal line in the middle, which I take to represent the lower stroke of the Pali letter, *n*, the radical of "void space, or vacuity." This, therefore, must be the fifth element, the *akāś* of the Hindus and the \_\_\_\_\_ of the Greeks. The symbol is thus strictly composed of the five radical letters of the five elements, *y*, air; *r*, fire; *v*, water; *l*, earth; and *n*, ether; which when combined contain the letter, \_\_\_\_\_, for Mount Sumeru, as well as the letter *O*, *m*, or *manas* or mind. In Plate XXXII, I have given all the different specimens of this symbol that I can collect from various sources."

There is no doubt that at one time the symbols of Buddha, Dharma and Saṅgha were being worshipped all over India. Recently a stone of Asokan polish with the symbols of Buddha, Dharma and Saṅgha at the top has been found out at Bhubaneswar and it is now preserved in the Ashutosh Museum of Calcutta. The photograph of the stone with the symbols is appended herewith. The symbols are a little different from those found out at Sanchi and other places but the Bhubaneswar symbols are almost exactly like the images of Jagannātha, Balabhadra and Subhadrā. The Bhubaneswara discovery proves that in Orissa the worship of the symbols was prevalent since the Ashokan period.

From the foregoing considerations we may conclude that during the reign of Asoka, the Savaras of Orissa were converted to Buddhism. A Buddhistic Stupa was constructed at Puri and the symbol of Tri-Ratna was there. By the 1st century B.C. or 1st century A.D. when Mahāyāna (The Great Path) was introduced and images of Buddha and Bodhisattvas were worshipped the simple-minded Savaras began to worship the Symbol of Tri-Ratna. The worship of Symbols is still to be found in the worship of Svastika which is really a combination of two Pali letters, *SU* (सु) and *TI* (ति), for *SUTI* is the Pali form of Svastika. The three



symbols taken together were called Jagannātha and that Jagannātha is another name for Buddha is known from Tibetan sources. So the name of Jagannātha is Buddhistic in origin. Later on Jagannātha was identified with Vishṇu when the Tantras were written.

Afterwards when the worship of the images came into vogue the three symbols were represented on pieces of wood and naturally an attempt was made to give them the appearance of human beings as far as possible.

Of the three images Jagannātha was considered to stand for Buddha of Buddhism. Dharma in Buddhism is believed to be a female. So one of the images was supposed to be a female. In Saṅgha, *i.e.*, the monastic order of Buddhists the relationship between the monks and the nuns is that between brother and sister. The Śavaras accordingly treated two of the images as brothers and third as their sister. Of the three Jagannātha was no doubt the most important.

Festivals such as the Snāna Yātrā (Bathing Festival), and Ratha Yātrā (Car Festival) were introduced after these wooden images came into existence. Snāna Yātrā is celebrated on the Full moon day of Jaishṭha. To bring out the image of Buddha some days after the commencement of the year and then to give it a bath was a part of Buddhistic ceremonials. The accounts of India left by Chinese travellers corroborate this statement. The Car Festival like the Bathing Festival is of Buddhistic origin. Fahien (5th century) gives a graphic account of the Car Festival at Khotan which is exactly similar to the Car Festival of Jagannātha in modern days. Fahien states that the Car Festival of Khotan was held in the month of Ashāḍha and the king swept the floors of the cars. The Car Festival of Jagannātha is held about the same time and the king of Orissa performs the same menial office of sweeping. There is no place for car festivals in the ceremonials in connection with the worship of Kṛishṇa-Vāsudeva or any other manifestation of Vishṇu. Another fact which deserves notice is that the entire worship of Jagannātha, Balabhadra and Subhadra during the period from Snāna Yātrā to Ratha Yātrā is performed by the Daitās who are descendants of the Śavaras.

Śaśāṅka conquered Kaṅgoda in the 7th century. He was a formidable opponent of Buddhism and consequently there must have been considerable opposition to Jagannātha worship. Harsha came after Śaśāṅka and conquered Orissa. The Karas or the

Bhaumas who came after Harsha encouraged Buddhism and the worship of Jagannātha might have been renewed with greater vigour. These ups and downs in the worship of Jagannātha must have given rise to traditions which ultimately changed into the story of conquest of Orissa by Raktavāhu when Śobhanadeva, the king of Orissa is said to have fled to Jhāraṅgha with the image of Jagannātha. This tradition was recorded in Madala Pāñji in the form that after Śobhanadeva, Chandrakaradeva became the king who was succeeded by Yayjāti Keśarī. It was Yayjāti Keśarī who revived Jagannātha worship at Puri.

In the 8th and 9th century Brahmanism tried to absorb Buddhism in its fold by accepting Buddha as an incarnation of Vishṇu and thus to deal a death blow to Buddhism as a separate religion. The Vedas do not speak of Avatāras or incarnations. In one section of Śānti Parva of the *Mahābhārata* six incarnations are mentioned while in another four more have been added. The latter section is considered to be spurious and interpolated at a later date (R.G. Bhandarkar). Hari Vamśa (3rd century A.D.) Purāṇa also mentions the same six Avatāras as the Śānti Parva. In the Vāyu Purāṇa (4th century A.D.) the names of the Avatāras are differently given in two different places. In one place the number of Avatāras is given as twelve and in the other as ten. Neither in the *Mahābhārata* nor in the *Harivamśa Purāṇa* nor in the *Vāyu Purāṇa* is Buddha regarded as an Avatāra of Vishṇu. It is in the *Varāha Purāṇa* that we find the earliest mention of Buddha as one of the ten Avatāras. It is difficult to ascertain the exact date of the *Varāha Purāṇa* but there can be no doubt that it was composed a long time after *Vāyu Purāṇa*. It may have been written in the 8th or 9th century, A.D. The *Bhāgavata Purāṇa* which was certainly written after the *Varāha Purāṇa* gives the number of the Avatāras differently in three different places. In one place it is taken to be 22, in another to be 23 and yet in another place as 16. Buddha is taken as an Avatāra in the *Bhāgavata Purāṇa* but it seems that the *Bhāgavata Purāṇa* has very reluctantly accepted him as an Avatāra, for he has been described as 'Mahāmoha Avatāra, i.e., the incarnation of Vishṇu who created great illusions, or who came down to the earth to lead the people away from the Vedic path. R.G. Bhandarkar is of opinion that this Purāṇa was composed in the 10th century. So we may suppose that it was about the 8th century that Buddha came to be regarded as an incarnation of Vishṇu or Kṛishṇa and in the 12th century Jayadeva in his description of the

ten Avatāras spoke of Buddha as the incarnation that discarded Vedic rites, the ceremonials of Yajña and melted with pity at the sight of slaughter of animals, (निन्दसि यज्ञविधेरहं श्रुतिजातम्, मद्यह्मदयदश्रुतपशुघातम्, केशव धृतबुद्धशरीरं जयजगद्देश हरे । ). After this Buddha came to be universally regarded as the incarnation of non-violence.

Thus we may conclude that in the 7th or 8th century when Buddha was taken as an Avatāra of Vishṇu, Jagannātha was also considered to be an Avatāra of Vishṇu. ) To explain the relation of Jagannātha with the two other deities it was regarded that Balabhadra was the brother of Jagannātha whose preceding incarnation was Kṛishṇa-Vāsudeva and Subhadrā was his sister. It was impossible to attribute any other relation between the images that had been regarded as brother and sister for centuries. So it is clear that Jagannātha was conceived as Vishṇu and not as Kṛishṇa-Vāsudeva. Most probably it was under the Kara or Bhauma rulers that Jagannātha was first considered as an incarnation of Vishṇu. It is known to our readers that Tribhuvana Mahādevī of the Kara dynasty encouraged Vaishṇavism. When Buddha was regarded as an Avatāra there was no change in the form of Jagannātha's worship but he was considered as a god of the Vaishṇavas. In this way Buddhism lost itself in Vaishṇavism.

During the rule of the Kara dynasty Tāntrikism was introduced into Orissa. In course of time Tāntrikism gradually entered into Buddhism, Śaivism and Vaishṇavism as well. The Śāktas were so much influenced by it that they committed many heinous crimes in the name of religion. We cannot assign any exact date to the introduction of Tāntrikism into any of these religions. From the image of a goddess dancing with a string of human skulls found at Udayagiri it can be only presumed that Tāntrikism was introduced in Orissa several centuries back.

The influence of Tāntrikism on the worship of Jagannātha is clearly discernible. The Tāntriks have greater devotion for Vimalā than for Jagannātha. According to them Vimalā and not Jagannātha is the presiding deity of Śrī-Kṣhetra. Pandit Binayak Misra thinks that the existing forms of Jagannātha worship is dominated by Tāntrikism. On the 8th day of the bright half of Āsvina a goat is sacrificed before the goddess Vimalā. Thus it is clear that

Tāntrikism of the Śāktas exerted its influence on Jagannātha worship. Sacrifice of animals had no place in the Tāntrikism of the Buddhists or the Vaiṣṇavas. In Matsya Purāṇa, Kapila Samhita and Utkala Khanda of Skanda Purāṇa, Vimalā has been very highly spoken of. It may be supposed that by the 8th or 9th century the worship of Vimalā had been very well established.

We are inclined to believe that in the 10th century A.D. when Keśaris ruled in Orissa, Tāntrikism exercised a great influence on the worship of Jagannātha. Śankarāchārya's visit to Puri indicates that by that time Puri had attained a great reputation as a holy place. Śaivism predominated towards the end of the Kār rule and it was firmly established during the Keśari kings. It is probable that towards the later part of the Keśari rule Śaivism declined and the Tāntrikism of the Śāktas gained ascendancy.

The glorious Gaṅga rule which continued for nearly 300 years from the 12th century commenced with Choḍagaṅgadeva who unified the whole of Orissa. About this time Rāmānuja came to Puri on his religious mission and then after some years there came Jayadeva. These visits of eminent religious teachers together with the spread of the belief that Jagannātha was the Buddha incarnation of Viṣṇu placed Jagannātha on a unique footing and he came to be recognised throughout India as the Buddha incarnation of Viṣṇu. Jagannātha has been worshipped as the form or image of Buddha since the time when Buddha was regarded as an incarnation of Viṣṇu.

Sāralādāsa in the Vana Parva of his *Mahabharata* says that King Indradyumna on opening the doors found that there were three images of Viṣṇu without hands and feet. They were shining with the halo of the Great Buddha. There were no ears, no nose, and no eyes. There were no fingers and no toes. The Great Buddha had appeared in the form of *three lines*. (1)

The tradition on which Sāralādāsa based this story indicates that the images were only lines. It only confirms the opinion of Cunningham. Further it suggests that all the three images taken together were considered to stand for Buddha or Jagannātha.

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- (1) नामाकणं श्रवणं ये नयनं न दिशि  
 देखि इन्द्रद्युम्न महा विस्मयरे वसि  
 महा बौद्ध विकाश होइला तिनिरेखा  
 कर चरण पञ्चव न दिशइ शिखा ।

Throughout India and other Asiatic countries Buddhism gave rise to a school of art and architecture which is still to be found. The image of Buddha was well-known not only in India where Buddha was born but also in China, Japan, Burma, Siam and even in Eastern Archipelego. The image of Jagannātha has nothing in common with that of Buddha. To regard the image of Jagannātha as the form of Buddha, one of the manifestations of Vishṇu is certainly significant. It does not conclusively prove that Jagannātha was from the very beginning worshipped as Buddha. On the other hand it indicates that the established fame of Jagannātha made it necessary to accept Buddha as an incarnation of Vishṇu.

By the 12th century it was well established that Jagannātha was the Buddha incarnation of Vishṇu. Since then the religious belief of the people of Orissa has been based on Jagannātha. All religious creeds seem to have contributed to this cult of Jagannātha. The Sunyavāda of Mahāyāna, Vajrā yāna, Sahajāyana of Buddhism, Jainism, Śaivism, Śakta worship, etc., all have exercised their influence on Jagannātha worship. Again from the 12th century to the middle of the 16th century the cult of Jagannātha was greatly influenced by Vaishṇavism. All these forces combined to give rise to a religious cult which was different from any of them and it became the mass religion of the people of Orissa. People professing different schools of philosophy had no difficulty in accepting this all-embracing religion, which centred itself in Jagannātha. For want of a better name we have termed it the Cult of Jagannātha.

In the 16th century when neo-Vaishṇavism or the cult of love was introduced in Orissa through Sri Chaitanya and his followers it was also absorbed into this cult of Jagannātha and Jagannātha came to be regarded as the chief deity of neo-Vaishṇavism. The death of Sri Chaitanya gave rise to a tradition that "he got absorbed within the god of the blue mountain. The form and spirit of Jagannātha and Chaitanya were of identical nature."

In the early part of the last century Sādhu Sundar Das of Kujibar (1700-1838) wanted to bring about a synthesis of Christianity and the cult of Jagannātha but his efforts were not crowned with success though his interpretation of the Bible elicited high praise both from Christian missionaries and others. Thus Jagannātha cult is an epitome of almost all religions of India. Many schools of philosophy have gone to its making and it occupies a unique position among the different religions of India. It will be unfair to identify this supremely Catholic and Cosmopolitan cult with any particular religion or school of philosophy.

Resistance and liberation Movements  
During British Afghan Period.

# RESISTANCE AND LIBERATION MOVEMENTS DURING THE TURKO-AFGHAN PERIOD

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*in the*  
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Resistance to foreign political domination has always been inspired by the loftiest ideals of liberty and patriotism, and in whatever form, this has done honour to the community or the nation which had undertaken it. Our historians are at present busy in writing an exhaustive history of the freedom movements that had taken place in various parts of India during nearly a century and a half of British subjection. After this monumental work is accomplished, one can be sure that the urge of freedom and opposition to oppression the two sacred human birth rights were ever awake in the hearts of our countrymen, even though their efforts usually ended in failure. But while all honour is due to the dauntless fighters for freedom who defied the British Imperial masters during the last few centuries, their task was certainly not more difficult than that of their heroic prototypes of the medieval age who struggled against more than enormous odds in an age of brutal and primitive warfare and even more brutal reprisals.

Students of Indian history should have no doubts about the true nature of early Turkish invasions and conquests. Men like Sultan Yaminidowla Mahmud Sabuktgin Ghorî, Ghiyasuddin Balban and Alauddin Khilji were as much foreigners in India as were Clives and Wellesleys and invariably much more ruthless. While it may be pleaded that the Turko-Afghans, after they had carved out an empire in India, severed their links with their Central Asian homes and as such were national rulers, unlike the British, it should be remembered that the early Muslim rulers administered the country principally for the benefit of themselves and their followers. The Turks constituted themselves into a proud and wealthy aristocracy who had scarcely any social contact with the teeming millions of India whom they invariably treated with contempt and quite frequent tyranny. The Turkish Blimps of those days were no less insufferable than their post-1857 European successors.

The foreign character of the Turks was based mainly on race and religion. Many of the contemporary Moslem historians reveal a race-consciousness which is not unlike the present day Malanism. The

great Baiban made it a rule that neither the Hindus nor recent Indian converts to Islam should be admitted into any office. The poet Amir Khusru in one of his elegies refers to the darkness of the Hindus and whiteness of the Turks and also calls the Hindus crow-faced. Historians of the period freely express a conquerors' contempt for the indigenous people of India and invariably show their approbation of destruction of temples and wholesale enslavement. But their partiality to the ruling race does not prompt them to suppress the facts of stiff resistance on the part of the Hindu rais and rawats.

A close and critical study of the great number of contemporary and semi-contemporary chronicles written in Arabic and Persian and dating from 11th to the beginning of 16th Century will reveal that the Muslim invaders and empire-builders had not only to fight hard and prolonged battles against the native princes and chieftains, but that many of the localities already over-run were recovered again and again. Quite a number of such localities, such as Katelwar, (Rohilkhand) the Ganges Jumna Doab, Ranthambhor, Gwalior etc., remained throughout typical pockets of resistance which could never be effectively subdued. In Northern India Assam and Orissa kept back the Moslem invaders till as far back as the Mughal period. The usual belief that the victory of Tiraori of 1192 left the whole of northern India prostrate at the feet of the alien conquerors is belied by solid facts as Prof. Habibullah in his excellent work 'Foundation of Muslim Rule in India' has conclusively shown. Neither was more than a fraction of Bengal conquered by Ikhtiyaruddin Bhaktiyar Khilji. Ranthambhor and Gwalior changed hands frequently while Rajputana remained almost sealed off from the invaders. It was not till the end of the reign of Alaaddin Khilji, the greatest annexationist of early Muslim India that Gujarat and Malwa were brought under the control of the Delhi Sultanate.

### *I. The Era of Intrusions from Mahmud to Mohammed Ghori (1002-1206)*

The real Muslim invasion of India began with the famous raids of Sultan Mahmud, the Yamini Turkish ruler of Ghazni. In spite of his superior generalship and more efficient military tactics his progress in-land was blocked almost at every step by patriotic Indian princes. Apart from a succession of Shahi Kings, such as Jaipal, Ananda Pal, Trilochan Pal and Bhim the Fearless (Nidar), Utbi, author of *Tarikh-i Yamini* names a number of stalwarts who risked all in defence of their hearth and home. Those of the resisters against Mahmud who deserve particular mention were Biji (Bijay) Rai of Bhatia or Bhera who, when he saw that there was no chance of escape, drew his dagger



and struck it into his breast, Kulchand (identified by Hodivala with Kokalla II the Kalachuri King) who slew his wife and drove the dagger in his own body and Vidyadhara the Chandella King, who is to be identified with Utbi's Chandel Bhor and Bida of Ibn-al-Asir. Though the Muslim chronicles record Vidyadhar's flight and ultimate submission, it appears that the power of this great prince could not be crushed by Mahmud. Another successful resistance to Mahmud's invading hosts came from Sangramaraja of Kashmir whose forces twice held up the Ghaznavids at the mountain fortress of Loharin (1017 and 1022) (Lohkot).

Muslim imperialism was contained within the precincts of the Punjab for more than a century and a half, to be revived in the exploits of Muizuddin bin Sam, the Shansibaniya ruler of Ghor, who is better known in Indian history as Muhammad Ghori. But Muizuddin's earlier attempts were doomed to ill-success and he tasted two serious defeats from Mutaraja II, the Solanki ruler of Gujarat and Prithwiraja III the famous Chahaman prince in the battles of Kayadra and Tirauri respectively. He won the second battle of Tirauri but it was not before a number of sanguinary skirmishes were fought that both Delhi and Ajmer could be captured. His two able lieutenants Kutubuddin Aibak and Ikhtiyaruddin Bakhtiyar Khilji conquered substantial portions of Western, Central and Eastern India, in course of which the Solankis and Paramaras were given some hard knocks while the Gahadavals and Sena dynasties were almost completely uprooted in the Madhyadesa and Western Bengal. Even after the victory of Kutubuddin over Jaychand at Chandwar the Dar Rajputs of the Upper Doab put up a stiff resistance under one Chandra Sen while further troubles were created by Hiraaj or Hariraja, brother of the fallen Prithwiraja, by Aj. Deo, the Chandella minister and by the Solanki King Bhima II. In the words of Hasan Nizami, author of *Tal-uj-Maasir* "the immense army of Nahrwala came to the assistance of the vanguards, (of the Mers of Ajmer), slew many of the Musulmans, wounded their commander pursued them to Ajmer and encamped within one parsang of that place".<sup>1</sup>

The crisis to Muslim arms was averted by the arrival of reinforcements from Ghazni.

## II. *Foundation of the Turkish Sultanate—Kutubuddin I to Kaikobad (1206-90)*

Kutubuddin's brief reign of four years (1206-10) though signalling the formal establishment of Muslim authority in India

<sup>1</sup> H. M. Elliot and J. Dowson, *History of India as told by its own historians*, Vol. II, p. 229.

proper, did not produce any further advance of Muslim arms. Many of the territories occupied by them were nearly lost and the conquests in Bengal region were seriously jeopardised by the sudden death of Bakhtiyar Khilji. During this early stage of the Delhi sultanate "by far the most serious menace came from the Hindus whose military power, only stunned by the rapidity of the conquest, now showed signs of recovery and even of offensive action".<sup>2</sup> The revival had already commenced before Iltutmish could take adequate action. Thus a neo-Chauhan dynasty was established at Ranthambhor by a grandson of Prithwiraja and Jalor, Bayana, Thangir, Kanauj, Gwalior and Badaun had all become so many centres of resistance. Chandella power was partially restored by Trailokyamalla or Trailokyavarman called Dhalaki wa Malaki by Minhajuddin.

The military achievements of Iltutmish were, in the light of above observations, in the nature of a reconquest rather than fresh expansion. Thus he recaptured Ranthambhor in 1226, Mandor in 1227 and Gwalior in 1232, the last fortress having been defended by Milak Dev who held it since 1229. Minhaj describes Milak Dev (or Mangaladeva), as 'the accursed son of Bisal the accursed.' Another opponent of Iltutmish was one Chahar Ajari who according to Hodivalal was none other than Chahardeva of Ajar (a place near Jhansi).<sup>3</sup> Iltutmish had also to re-establish Muslim rule in Oudh and the Doab as well as at Kanauj. A clash between the officers of Iltutmish and Anangabhima II the Ganga King of Orissa is indicated and victory of the Orissan army claimed in an inscription of that King. Yet another resistance leader was one Bartu (Bharat ?) of Oudh, whose formidable insurrection was suppressed by prince Nasiruddin, the eldest son of the sultan.

The tempo of liberation movement was checked by the vigour of Iltutmish but it was by no means permanently scotched. From the time of his death (1236) till the accession of that man of blood and iron, Ghiyasuddin Balban a serious attempt to cast off the yoke of the foreigners is generally discernible throughout northern India. Probably the weakness of the successors of Iltutmish and the recurrence of Mongol invasions were factors which facilitated such a movement. The remarks of Dr. Habibullah deserve a close attention in this connection. He says that following the death of Iltutmish the native princes and peoples recovered their military energy and began a bid not only for resistance but also for liberation and he designates the entire period as one of Hindu aggression.<sup>4</sup> Revival of indigenous powers at Rewah, Jhansi,

<sup>2</sup> A. B. M. Habibullah, *Foundation of Muslim Rule in India*, p. 11

<sup>3</sup> S. H. Hodivalal, *Studies in Indo-Muslim History*, p. 11.

<sup>4</sup> Habibullah, *loc. cit.*, p. 135.

Gwalior and Bundelkhand as well as Katehr is conclusively attested by numerous epigraphic evidences as well as by the accounts of the official chronicles. In the reign of Alauddin Masud Narasinha I the ruler of Orissa (called Jajnagar by the Muslim historians) and the famous builder of Konark temple, launched a vigorous drive against Bengal, then administered by the Governor Tughan Khan, captured Lakhmor, a frontier post, and besieged Lakhnauti the capital, which was saved only by the timely arrival of a reinforcement (1213). Another governor in Bengal Yuzbak met with his end in an attempt to conquer Kamrup, thus anticipating Mir Juna by four centuries (1256).

Turkish imperialism was therefore essentially on the defensive during the reign of Nasiruddin Mahmud when the command of the army was mostly entrusted to Ulugh Khan, the future Balban. The campaigns of this reign were conducted against the unvanquished chieftains of Central India, Mewat (Alwar region) Katehr and South Bihar. So runs the *Tabakat-i-Nasiri*: "In 651 AH. Ulugh Khan-I Azam represented that the Sublime Standards should be put in motion for the purpose of ravaging and carrying on holy war in order that the independent tribes, the Raes and the Ranahs who have not been punished may receive a thorough chastisement."<sup>5</sup> Another formidable threat to the Sultanate came from Dalaki wa Malaki, *i.e.*, Trailokyamalla who had been defying the Muslim power since the days of Ilutunish and who, according to the Ajaigarh inscription of his son Viravarmen was the uplifter of the land from the ocean of disasters caused by the *Turuskas*.<sup>6</sup> Balban's expedition against him was at best partially successful. Trailokya Malla was a chandella whose territory lay between Karah and Kalanjar.

Perhaps the stiffest resistance offered to the establishment of Turkish rule came from the people of Mewat. To quote from Minhaj, "In 658 AH. there was in Koh Payah (*i.e.*, mountains of Mesat) a community of obdurate rebels who plundered the property of Musalmaus. The leader of the rebels was a person Malka by name, an obdurate Hindu gabr, like a gigantic demon."<sup>7</sup> In spite of bloody reprisals on the part of Ulugh Khan the Mewatis were not suppressed and constituted a fresh challenge to the Sultanate in the early years of Balban's reign. This shows that the insurrection was both political and popular in character and not predatory raids as one modern historian describes them.<sup>8</sup> As Dr. Habibullah states the Mewati insurrection

<sup>5</sup> *Tabakat i-Nasiri*, translated by Major H. G. Raverty, Vol. II, p. 816.

<sup>6</sup> H. C. Roy, *Dynastic History of Northern India*, Vol. II, p. 720.

<sup>7</sup> Majumdar, Raychoudhury and Dutta, *Advanced History of India* p. 289.

<sup>8</sup> Raverty, *loc. cit.*, Vol. II, p. 850.

represented the attempts of the Jadon Bhatti Rajputs of the locality to assert their independence.

The episode of Imaduddin Raihan, a Hindu convert who enjoyed a brief tenure of power (1253-54) as the Wakil-i-Dar, i.e., Chief adviser, of Nasiruddin Mahmud illustrates the superior-race-complex of the Turkish rulers of India and their henchmen. It is interesting to observe the outbursts of Minhaj against the authority exercised by this native of India. "The oppressed besought the Holy Creator that the darkness of the Rayhani tyranny might be changed to the sunlight of Ulugh Khani administration; the reason was that the Malik and servants of the Sultan's court were all Turks of pure lineage and Tajiks of noble birth and Imaduddin Rayhan, who was castrated and mutilated and of the tribes of Hind." Commenting on his eventual overthrow the same author writes with satisfaction.—"The decree of the Creator was on such wise that the prosperity of Turks rose victorious, and the influence of the Hindus sank into the dust of defeat."<sup>9</sup>

From the accession of Balban the tide began to turn and the leaders of resistance had a sore trial. Balban's methods were Assyrian in their unmitigated ferocity. Two most serious challenges to his authority came from the Mewatis with whom he had already an initial brush and from the people of Katehr. Barani, who now replaces Minhaj as the best contemporary chronicler, speaks about them in the following words. "Their (Mewatis) turbulence had increased and their strength had grown in the neighbourhood of Delhi through the negligence of the sons of Iltutmish . . . . . For a whole year the Sultan was engaged in overthrowing them. He built a Fort at Gopalgir and put Afghans in several posts. In this campaign 1,00,000 of the royal army were slain by the Mewatis and the Sultan with his sword delivered many servants of God from their assaults and violence" . . . . .

The Katehr insurrection was equally formidable and its suppression was even more violent. "Sending forward a force of 500 archers he gave orders to slay every man and to spare none but women and children, not even boys who had reached the age of eight or nine years. The blood of the rioters ran in streams, heaps of slain were to be seen in every village and jungle . . . . . The army brought the Hindus to submission." It is obvious that the Katehr insurrection took the form of a people's war, otherwise the Sultan would not have taken to such terrorising methods.

### III. The Khilji Imperialism—Jalaluddin to Kutubuddin II (1290-1320)

The work of reconquest begun by Balban and interrupted during

<sup>9</sup> *Ibid.*, p. 836.

the reign of Kaikobad was resumed in right earnest by the Khiljis with whom a new era of Turkish imperialism began. Contrary to popular belief, Jalaluddin Firuz Khilji showed considerable energy and resolution in this matter. He conducted campaign against Jhain and Ranthambhor the details of which are recorded in Amir Khusru's *Miftah-ul-Futuh*. The leader of Hindu resistance in this area was one Gurdan Saini (Gurudas Swami ?) "who was the most experienced warrior amongst the 40,000 rawats of the Rai . . . . . The Saini advanced against the Turks from Jhain and after several action he was slain."<sup>10</sup> But Jalaluddin failed to make any impression, on Ranthambhor which had reverted to native rule under Vagbhata and Jaitrasinha and was since 1283 under the possession of Hammira as is attested by Hammira Mahabhavya. The later Muslim chroniclers, Barani and Afif attribute the sudden abandonment of the siege of Ranthambhor to the pious Sultan's refusal to cause shedding of Mussalman blood but it was actually a result of a sense of incapacity. A second attempt on Ranthambhor proved equally unavailing (1293).<sup>11</sup>

It will be of interest to refer in connection with the reign of Jalaluddin Khilji to the armed rising of Alauddin, better known as Malik Chhajju, a nephew of Balban. Among the adherents of Malik Chhajju, many were Hindus who probably tried to take advantage of the civil war between two sets of foreigners. As Barani says—"the most noted of them received betel from him (Chhajju) and promised to fight against the Standards of the Sultan." This is confirmed by the author of *Tarikh-i-Mubarak Shahi* who gives the names of the Hindu allies of Chhajju—Piram Deo and Bhim Deo.<sup>12</sup> After the defeat of the rebel army, the captive Hindus were pounded into bits under the feet of the elephants while the Musalmans who were Hindis (native born) were distributed as slaves amongst the Chief.<sup>13</sup> Amir Khusru, as usual shows his race-consciousness when he speaks of the assistance given to Chhajju by a few black in-fidels of Hindusthan.

Alauddin's eventful reign of twenty years (1296-1316) was one pitiless assault on the political and civic liberty of the Hindus both in the north and in the south. One of the most important aims of his administration was to grind down the Hindus by depriving them of "that wealth and property which fosters disaffection and rebellion." "The Hindu" says Barani, "was to be so reduced as to be left unable to keep a house to ride on, to carry arms, etc."<sup>14</sup>

<sup>10</sup> Elliot and Dowson, Vol. III, p. 539.

<sup>11</sup> N. B. Roy, *Career of Jalaluddin Firuz Khilji*. (Reprint from a volume of Indian and Iranian Studies), p. 276.

<sup>12</sup> *Tarikh-i-Mubarak Shahi*, translated by K. K. Basu, pp. 53-60.

<sup>13</sup> N. B. Roy *loc. cit.* p. 268.

<sup>14</sup> Elliot and Dowson, Vol. III, p. 182.

These measures show that the fire of the love of freedom was by no means extinguished. Side by side with these draconic legislations, ruthless efforts were being made to bring under subjection extensive areas of Northern India and vast tracts of the Deccan and South India under the triumphant wheels of Turkish Imperialism.

The most faithful account of the military career of Alauddin Khilji in course of which a number of leaders of resistance fought against enormous odds is given in Amir Khusru's *Khazain-ul-Futuh*, which was probably adapted from the much more voluminous "Fathnama" (of Kabiruddin), no longer available. The accounts of Alauddin's conquests were a "mad dance of rapine, ambition and death."<sup>15</sup> The Baghelas of Gujarat and the Paramaras of Malwa were finally overwhelmed, the latter not without much struggle, in which Kuka Pradhan or Haranand a minister of the Raja Mahlik Deo, covered himself with glory. "Kuka came blindly forward . . . . . In the twinkling of an eye he was pierced by innumerable arrows . . . . . Then his soul fled to the streams of the underworld, while his unfortunate head was sent to the imperial court."<sup>16</sup> Ranthambhor was taken after a sustained siege for about two years after which in sheer desperation Rai Hammira first consigned the female inmates of his household to fire and was killed in course of the fight that ensued. The Rajputs of Mewar similarly sacrificed in defending Chitor their lives as well as their honour. Two other leaders of Rajputana, Sital Deo of Siwana (near Jodhpur) and Kahner or Kastmar Deo of Jalor paid the price of their resistance with defeat and death.

The hurricane southern campaigns of Malik Manik (better known by his Muslim name Kafur) and Khwaja Haji led to epoch-making results. The Marathas of Dvgiri, the Telegues or Tilang or Warangal and the Karnatakas and Tamils of the far south all felt the terrible impact of militant Islam. We learn how in course of campaign in Warangal, one Banik Deo, a mukaddam made a night attack on the Muslim army. The king Pratapa Rudra Deva (Ludder Deo), though brave and courageous in the siege finally submitted and became tributary after surrendering his fabulous treasures. The Hoysala King, Ballal Deo (Ballal III) followed suit. Amir Khusru recounts the story of his transactions with the Turkish generals at length, in course of which he is reported to have asserted that he would present all that he had to the Muslim army and keep nothing for himself except his Hindu faith and the sacred thread.<sup>17</sup> The southernmost tip of India—Mabar

<sup>15</sup> Muhammad Habib, *Campaigns of Alauddin Khilji*, p. XII.

<sup>16</sup> *Ibid.*, p. 44.

<sup>17</sup> *Ibid.*, p. 22.

or the Pandya country was then overrun, ostensibly in the interest of one of the rival candidates to the disputed succession. It was a *terra incognita* for the Muslim army and Khusru rightly says that the rebels of that territory had never seen Muslim horsemen in their dream. The military ruthlessness of Alauddin was so overwhelming that resistance movements during the period were all doomed to dismal failure. Many of the princes therefore sought safety in submission which was however rather readily accepted by the Sultan, as in the case of the rulers of the south. Subjugation and submission were not followed by annexation, unlike what happened in the north.

Kutubuddin II Mubarak, Alauddin's son and successor was even more ambitious than his father and really determined to annex and incorporate the Deccan and Warangal. He found in his favourite Hasan, afterwards Khusru, a convert like Kafur, the most efficient instrument of this aggressive policy. The military activities of Kutubuddin are described in detail in Amir Khusru's *Nuh—Sipihir* which reveals several instances of attempts at liberation. Though Ramchandradeva had accepted Turkish tutelage, the proud Maratha people were obviously all for a bid to freedom. The first attempt had been made by Ramchandra's son Singhana (not Shankar)<sup>18</sup> with disastrous results to himself. A second and more determined attempt was made by one Raghu, the minister who led 10,000 Hindu cavalry. Amir Khusru's observations are illuminating. He says,—“the Hindus who had pretended to independence were either slain, captured or put to flight. Raghu himself was most seriously wounded.”<sup>19</sup> The task of liberation was now taken up by Harapala, a son-in-law of Ramchandra. We learn from *Nuh Siphir* that Harapala gave Khusru a lot of trouble and was ultimately captured, with wounds. After he was put to death, his followers burnt themselves in a common funeral pyre. Of the men who defended Warangal against Turkish attacks Kunda a powerful warrior and Devra (j) Mehta were conspicuous.

(To be continued)

<sup>18</sup> Hodivala, *loc. cit.*, p. 373.

<sup>19</sup> Elliot and Dowson, Vol. III, p. 558.

# RESISTANCE AND LIBERATION MOVEMENTS DURING THE TURKO-AFGHAN PERIOD

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## II

### IV. THE STRANGE INTERLUDE OF KHUSRU, 1320

The brief interlude of the authority enjoyed by Hasan now entitled Nasiruddin Khusru (1319-20) deserves a close study from the viewpoint of the resistance and liberation movement. The role of Khusru as a resolute though unscrupulous champion of Hindu revival is clearly discernible from the accounts of all contemporary and semi-contemporary writers as Amir Khusru, Barani, Ibn Batuta and Yahya Sirhindi, but curiously enough, modern writers led by Wolsley Haig exhibit a tendency to regard this interlude as an unhappy chapter and its author as a mere low-born careerist. As Prof. Hodivala contends, Khusru and his men were probably Hindus of military caste, used to stubborn warfare and not low-caste Parwaris<sup>20</sup> and may well have been Paramara Rajputs of Gujrat. It also appears that Firista's allegation that he forcibly married Devalrani is not based on facts.

Barani describes Khusru as a young Parawari and thoroughly disapproves of the Sultan's infatuation for him and charges him with anti-Muslim activities even before he had seized power by murdering Kutubuddin.<sup>21</sup> The author of *Tarikh-i-Mubarak Shahi* is more explicit. He says that he and his brother (later entitled Khan-i-Khanan) fell into the hands of the Muslim army and became incorporated with the body of Sultan's personal slaves.<sup>22</sup> Though he is referred to as of faulty origin this denotes his Hindu ancestry rather than his low-caste. At any rate Khusru's short tenure of power was regarded by contemporary Musulmans, particularly those of foreign blood, as a bid for re-establishment of Hindu polity. While Barani says that the Hindu religious rites were given free play and that the Hindus rejoiced greatly, boasting that Delhi had once more come under Hindu rule, and the Musulmans had been driven away and dispersed.

<sup>20</sup> Hodivala, *loc. cit.*, pp. 368-71.

<sup>21</sup> Elliot and Dowson, Vol. III, p. 219.

<sup>22</sup> K. K. Basu, *loc. cit.*, p. 86.



Ibn Batuta goes to the length of stating that "Khusru issued objectionable orders, such as an order prohibiting the slaughter of bullocks".<sup>23</sup> As was inevitable, Khusru's policy alarmed a strong section of Turks and they called Ghazi Malik, the Governor of Dipalpur to redress the balance in favour of the cause of Turkish race and Islamic religion. Though some writers regard the call of Islam in danger as a piece of interested propaganda, the testimony of Amir Khusru who was probably an eye witness proves beyond doubt that Khusru certainly stood for a revivalist ideology which was destined to triumph in the South in course of the next generation. A close and careful study of the details furnished in the *Tughalaknama* of Amir Khusru shows that though by liberal distribution of money Khusru did retain the support of a section of the Turkish nobility, his chief and most loyal collaborators were all Hindus, such as Randhul, (i.e. Ranadhabal entitled Rairayan), Sunbul, Maldeo, Tauba (or Tobo) as well as his own half-brother Khan-i-Khanan Hisamaldin. Ishwari Prasad, though recognising that Khusru aimed at establishing a Hindu supremacy, is perhaps not quite right in dismissing his associates as outcastes from Gujrat.<sup>24</sup> The amount of resistance offered by Khusru against Ghazi Malik, the future Ghiyasuddin Tughlak, indicates that his plans would have been realised, if a powerful Hindu Raja had organised a confederacy of his fellow princes. Excepting Barani, other historians, such as Amir Khusru, Sirhindi and even Badauni speak in high terms of Khusru's desperate courage in the battles that followed. The description of these battles as recorded in the *Tughalaknama* leaves readers in no doubt about the patriotic-religious stand of Khusru and his men.

Khan-i-Khanan's army consisted of Musalmans and Hindus—"Hindu rawats riding on Indian horses with flattering Brahmins raising the shouts of harmahade (Dharmayuddha), the badarawats and 'bhats' singing warlike songs. On the rout of this army, Khusru personally led a second army after distributing huge sums of money among his followers the greater amount going to the Hindus." While the majority forming his right wing were Moslems such as Yusuf Khan Sufi and two former associates of Malik Kafur, "his left was composed of such men as Khan-i-Khanan (his brother), Rai-Rayana Randhul, Gajbarmang, Sunbul, Maldeo and a host of Barawus with rais and ranas including 'Ahirdeo, Abardeo, Amardeo'. Then there were Narsih, Sainsih, Parsih, Harmar, Bairimar and Pasmar

<sup>23</sup> Elliot and Dowson, Vol. III, p. 605.

<sup>24</sup> Ishwari Prasad, *History of the Qaraunah Turks in India*, p. 11.

all like serpents and crying mar mar . . . The battle now started and Hasan's army made such a fierce onslaught that Tughlak's followers were swept off their feet and their ranks were broken up. He, however, remained firm and . . . personally led a severe counter-attack . . . But at this juncture an army of more than a thousand black-visaged Barawus attacked the malik crying Narayan to the Allaho-Akbar of the Mussalmans . . . This was a critical moment for Tughlak. He however stood his ground and drove back the Hindus with great slaughter." <sup>25</sup>

#### V. THE SULTANATE AT ZENITH—GHIYASUDDIN TUGHLAK AND MUHAMMAD-BIN TUGHLAK (1320-51)

With the establishment of the Qarauna or Tughlak dynasty a fresh vigour was infused in the Sultanate of Delhi which, as a matter of fact, rose to its zenith under this regime. But the forcible imposition of Turkish rule in such areas as Gujarat, Deccan and South India during the previous regime and associated with the sack of cities, the slaughter of the people and the plunder of temples left an immense impression on the mind of the people. Tentative movements for liberation were set in motion. The descendants of Khengar in Surashtra, the Rathors of Idar and the Gohils of Champanir kept up a heroic struggle for their independence.<sup>26</sup> The Mewaris now commenced their struggle for freedom which culminated in the restoration of the Sisodia rule in Chitor by Rana Hammir early in the reign of Muhammad-bin Tughlak.

The first Tughlak campaign was aimed against Warangal. This fact underlines the incompleteness of the previous conquests as well as the strong attachment of the Kakatiya princes to their traditional freedom. The expedition was undertaken by the crown Prince Ulugh Khan, the future Muhammad-bin Tughlak sometime in 1322. The first attack was repulsed with heavy loss but ultimate success was gained by the prince who captured the Raja Prataparudra II (Ludder Deo) along with his whole family. The Raja was sent to Delhi but he died on the way. This led to the final overthrow of the Kakatiya dynasty and the incorporation of the kingdom of Warangal in the Delhi Sultanate.<sup>27</sup>

The early part of the reign of Muhammad-bin Tughlak saw the fulfilment of the imperial ambition of the Turkish

<sup>25</sup> M. W. Mirza, *Life and Works of Amir Khusrû*, pp. 249-51.

<sup>26</sup> Ishwari Prasad, *loc. cit.*, p. 22.

<sup>27</sup> Hodivala, *loc. cit.*, p. 387.

Sultans. Never since the days of the Mauryas was so large a part of the Indian subcontinent brought under the same sceptre. The Alai system of tributary protectorates was now replaced by an integrated unitary state, and the empire could now boast of as many as twenty-three provinces. But the foundation of the empire was almost based on quicksand, and separatist and liberation movements were already on the offing. Yet the Sultan was in many respects superior to his predecessors. He was no believer either in Islamic theocracy or in racial superiority of the Turks. He left the Rajputs more or less alone and made occasional appointments of Hindus in important position, one of them being one Ratan,<sup>28</sup> and received loyal collaboration from Hindu princes. Still the entire reign was disfigured by risings, partly feudal and bureaucratic and partly nationalist, leading to the eventual secession of border provinces, like the Deccan, South India, Gujrat and Bengal. It appears that Muhammad, an accomplished, humane and progressive prince as he was, particularly abhorred rebelliousness of his subjects and visited dire chastisement on them, irrespective of their religion.

The rebellious movements in South India, Deccan, Bengal as well as Gujarat and Sind require particular mention.

The rebellions in South India took the form of a nationalist and religious revival of the Hindus, as a reaction to the oppressive alien rule imposed and maintained by force for about a quarter of a century. Though various theories exist regarding the identity of the founders of the Vijaynagar Empire, the six sons of a Sangama led by Harihara and Devaraya or Bukka—the emergence of a strong and vigorous state, south of the Tungabhadra was certainly the most successful culmination of the movements for liberation which had been proceeding during the last century and a half. Actually the foundation of Vijaynagar was the result of a collective enterprise in which, besides the Sangama brothers, the Kakatiya prince Krishna Nayak (Kanhya Nayak), Hoysala Vira Ballale IV and Prolaya Vema, the Reddi chief of Kondavid played important roles. According to Mahdi Hossain, the relation of Kanhya Nayak, who apostatized from Islam, and so referred to by Barani, was Devaraya or Harihara, the first real king of Vijaynagar.

The liberation and separatist movements in the Deccan and Bengal were led by Muslim adventurers like Ismail Mukh Afghan,

<sup>28</sup> Ishwari Prasad, *loc. cit.*, pp. 380-81.

Hasan Kangu and Fakhruddin who laid the foundation of the independent Sultanates of the Bahmani Kingdom and Bengal respectively.

In the western part of the empire, the Rajput dynasties now began to re-assert themselves. All contemporary and semi-contemporary sources agree that Sultan Muhammad waged no wars with the Rajputs and that his policy towards them was far from aggressive.<sup>29</sup> While this may indicate that the Sultan did not inherit the repressive policy of the Khiljis in this respect, it may also suggest his having accepted Rajput independence as an accomplished fact. As a matter of fact, Tod and Gauri Shankar Ojha mention a Rajput bardic tradition of the Sultan's reverses at the hands of Rana Hammir of Mewar, the foremost Rajput liberator of the day.<sup>30</sup>

The men who conducted the rising in Gujarat and Sind were besides the foreign Amiran-i-Sadah, who were leaders of mercenary troops for the most part foreigners, Taghi, a cobbler by profession and originally a slave of Turkish nobleman, the Rakhengar of Cutch, Mokhraji Gohel of eastern Kathiawar and the Jam of Thatta. Of these Mokhraji Gohel was a daring searover who was ultimately brought to bay and put to a violent death.<sup>31</sup>

The rebellion of Taghi raised a serious issue since the rebel leader captured both Nehrwalla Pattan and was also joined by a number of Hindu and Muslim chieftains and officers. "He had won over the foreign amirs of Gujarat . . . . Many of the Mukaddams . . . . joined him." Though Taghi is called a Turki slave by the author of *Sirat-i-Firuz Shahi*, it is significant that he was originally a cobbler and that his chief support came from the Hindus of Gujarat. He killed Malik Muzafer, the deputy governor of Nehrwalla, marched upon Cambay and proceeded to Broach with the combined army of the Hindus and the Musalmans. Later he inflicted a sharp defeat on a royal force but fled at the approach of the Sultan. He was routed by the Sultan at Takalpur and then he implored the assistance of the Hindu Chief of Girnar when no response was forthcoming. Taghi now left Gujarat and passed on to Damrila and Thatta in Sind. It was in course of further pursuit of him that the Sultan fell ill and eventually died.

The rebellion of Taghi and its subsequent course illustrate two points. The first is that a determined rebellion against Central

<sup>29</sup> Mahdi Hossain, *Rise and Fall of Muhammad-bin Tughluq*, p. 96.

<sup>30</sup> G. S. Ojha, *Rajputane-Ka-Itihasa*, p. 306.

<sup>31</sup> M. S. Commissariat, *History of Gujarat*, p. 41.

authority was liable to draw sustenance from natives of the soil. The second is that the Gujrat rising did not ultimately assume the character of a war of liberation because of the known liberalism of the Sultan's attitude to the Hindus. As a matter of fact, the Hindu chiefs grew lukewarm towards Taghi and the Sultan had the satisfaction of receiving the voluntary homage of "ranas, muqaddams and Mahants of Gujarat" <sup>32</sup>.

## VI. THE DECLINE AND DOWNFALL OF THE SULTANATE—THE LATER TUGHLAKS, SAYYIDS AND LODIS (1351-1526)

If the reign of Muhammad-bin Tughlak saw the liberation of the southern part of the Turkish Empire, the next reign was to begin a process which was destined to finally break asunder the empire in northern India. While no further loss of territory took place in the long reign of Firuz-bin Rajab (1351-88), the character and policy of this Sultan certainly served as the chief impetus to determined and desperate struggles for independence in the familiar regions of Mewat and Katehr as well as in Rajputana. The Sultan's religious policy was intolerant to the extreme and this certainly accentuated the latent hostility of the subject population. It is interesting to hear from this 'Akbar of the Sultanate period' (Elliot) such sentiments as appear in his autobiography, the *Futuh-i-Firuz Shahi*—"I destroyed these (Hindu) edifices, and I killed those leaders of infidelity who seduced others into error . . . . I encouraged my infidel subjects to embrace the religion of the prophet." <sup>33</sup> Actually a Brahman was burnt to death for publicly worshipping his deities.

Firuz made two attempts to reconquer Bengal, then firmly held by the Iliyas Shahi Dynasty but only complete failure resulted from them. The official chronicler Shamsi Siraj Afif (author of *Tarikh-i-Firuz Shahi*) gives specious arguments in order to cover up the weakness of his patron which are really unconvincing. It is noteworthy that one of the leaders of the Bengal army which resisted Firuz in the first campaign was a Hindu, Shahadeo, as is given in *Tarikh-i-Mubarak Shahi*.<sup>34</sup> At the end of the second expedition to Bengal, Firuz turned his arms against the hitherto unsubdued kingdom of Orissa, then ruled by Birabhanudeva. Though he only succeeded in obtaining a perfunctory submission from the king of

<sup>32</sup> Ishwari Prasad, *loc. cit.*, p. 231.

<sup>33</sup> Elliot and Dowson, Vol. III, pp 380-81.

<sup>34</sup> K. K. Basu, *loc. cit.*, p. 129.

Orissa, he nevertheless had the religious satisfaction of desecrating and destroying the idol of Jagannath at Puri. A few years later he marched to Sind and there faced a general popular movement. Ultimately he extricated himself from great personal danger with the help of reinforcements from Delhi.

The most important resistance movements in this reign were those led by Rai Sumer and Adharan (Uddharan), two muqaddams of Etawah, and one Khargu, the muqaddam of Katehr. About the rebellion of the first two, the author of *Tarikh-i-Mubarak Shahi* says that having rebelled against the sultan and then worsted, they were taken to Delhi in about 1377 with their wives, children, horses and attendants.<sup>35</sup> These two men were to create further trouble in the time of Firuz's successors.

The rebellion of Khargu, the Chief of Katehr was perhaps the most vocal protest against the Sultan's religious policy and at the same time it marked the beginning of the end. He had killed three Sayyid officers of the Sultan and thereby called upon himself as well as the entire region the ruthless vengeance of the Sultan. Though Khargu fled to the mountains, Firuz continued the devastation of the whole of Katehr till thousands of the local people were massacred and 23,000 were enslaved. Even Barani, who can never be accused of partiality to the co-religionists of Khargu exclaims that the spirits of the murdered Sayyids themselves arose to intercede.

One of the measures taken by Firuz Tughlak to stifle the liberation movement in the locality of Mewat was the conversion of an important branch of the Bhatti Rajputs who had put forward a gallant resistance during the early days of the Turkish period.<sup>36</sup> This, however, proved unavailing for the house of Mewat was to supply some of the most redoubtable leaders of resistance up to the establishment of the Mughal rule.

During the next ten years the Tughlak dynasty as well as the Delhi Sultanate began to crumble to pieces. A new state emerged in about 1394, Janupur, and Gujarat, under its masterful governor Jafar Khan was well on the road to secession from the Sultanate.

Timur's terrible invasion of 1397-98 took a heavy toll of lives and left India prostrate under the blow. It was a repetition of the invasions of Sultan Mahmud but here the fury and cruelty of the invaders were much more intense. Timur had come to invade India

<sup>35</sup> *Ibid.*, p. 141.

<sup>36</sup> Hodivala, *loc. cit.*, p. 390.

because he thought that the Sultans of Delhi had given the Hindu undue liberty of worship. Among those who resisted him were Dulchand (called Julian Bhatti by Yahya-Sirhindi) of Bhatnir, the Jats of Tohana, the leaderless populace of Delhi, Bahadur Nahir of Mewat and a rai named Bhaharuz (Bharaddaj?) of the Siwalik hills. The army of the Sultanate, commanded by Mallu Iqbal, the vizier and the *de facto* ruler, was scattered near Firozabad. Since both Sultan Nasiruddin Mahinud and the vizier fled respectively to Gujarat and Baran, Delhi was left to bear the full brunt of this fresh Turko-Mungol outburst. The resistance of the people of Delhi deserves recounting from the *Malfuzat-i-Timuri*: "It came to my knowledge that great numbers of Hindus and gabrs with their wives and children came into the city. When the Turkish soldiers proceeded to apprehend them many of them drew their swords and offered resistance. The savage Turks fell to killing and fighting. The Hindus set fire to their houses with their own hands, burned their wives and children, and rushed into the fight and were killed. The Hindus and gabrs of the city showed much alacrity and boldness in fighting." Again, on the following day: "It was brought to my knowledge that a great number of infidel Hindus had assembled in the Masjid-i Jami of old Delhi, carrying with them arms and provisions, and were preparing to defend themselves. I immediately ordered Amir Shah Malek and Ali Sultan Towachi to take parties of men and proceed to clear the house of God. They accordingly attacked these infidels and put them to death."<sup>37</sup>

During the later Tughlak period several chiefs put themselves the vanguard of prolonged resistance movements. These were, apart from the Khanzadas of Mewat, Bir Singh, the Tomara Chieftain of Gwalior and his grandson Biramdeo, Rai Sumar and Rawat Uddharan (called collectively Sarbadharan by Muslim chroniclers), Jaju, Jit Singh Rathor, Bir Bahan of Banugnaw and Abhay Chand of Chandu. The author of the *Tarikh-i-Mubarak Shahi*, the most original authority for this period, laments that taking advantage of the weakness of and dissensions among the Tughlak rulers "the infidels of Hindusthan gathered strength, withheld the paying of the poll-tax and tributes and put to plunder the villages of the Musalmans." A little below the same author remarks that the affairs of the feudal lands of Hindusthan were far from satisfactory owing to the turbulence of the base infidels.<sup>38</sup>

<sup>37</sup> Elliot and Dowson, Vol. III pp. 446-47.

<sup>38</sup> K. K. Ratan, *loc. cit.*, pp. 155-55.

When the Tughlaks yielded place to the Sayyids as the sovereigns of a shrunken kingdom of Delhi, the native chieftains made an even more serious bid for establishing their independence. The first Sayyid ruler Khizr Khan was, however, ably served by his vizier, Tajul Mulk who commenced a raging and tearing campaign against the resistance leaders of the Doab and Central India. The author of *Tarikh-i-Mubarak Shahi* credits him with great victories over the rebel leaders of Mewat, Katehr and Gwalior. Jalasor (near Mathura) and Chandwar were wrested from the Hindu chiefs and made over to the Muslims who had held them before.<sup>39</sup> But the suppression of these risings was only temporary. The affected areas rose into rebellion again and again while Rai Hansu Bhatti, son of Dulchand, the gallant opponent of Timur created fresh trouble. The Hindu rebel Sidhpal played a leading part in the insurrection which ended in the overthrow of Mubarak Shah in 1434. The new Sultan Muhammad was compelled to appease him at the beginning. Sidhpal, however, ultimately committed suicide in order to escape reprisal.

The progress of the resistance movement continued unabated during the rule of the Lodis (1451-1526). The iconoclastic zeal of Sikandar Lodi brought into existence a renewed wave of persecution and further stimulated Hindu nationalist resistance. He was so zealous a Muslim that he "utterly destroyed divers places of worship of the infidels".<sup>40</sup>

One of the leading resistance leaders of this reign was Juga, a zemindar of Jaunpur who with a following of 10,000 men raised the standard of rebellion. Pursued by Sikandar he took refuge with Husain Sharki of Jaunpur who honourably refused to surrender him. The other rebel leaders were Bhed or Bhidechandra of Bhatghore and his brother Salivahan; Gwalior and Dholpur also gave great trouble. The most typical act of fanatical bigotry on the part of the Sultan was the burning alive of a Brahman named Baudhan or Bhavananda of Kaithan who had asserted that Hinduism and Islam were both good religions. As Ishwariprasad says "to men like Bodhan, the Hindu martyrs of the middle ages, who cheerfully suffered death for the sake of their convictions, the Brahmanical Church in India owes not a little of her vitality and vigour."<sup>41</sup>

The death of Sikandar and his succession by Ibrahim Lodi did not improve the situation for the Afghan Sultanate. The Hindus

<sup>39</sup> Ishwari Prasad, *History of Muslim Rule in India*, p. 224.

<sup>40</sup> Elliot and Dowson, Vol. IV, p. 447.

<sup>41</sup> Ishwari Prasad, *Medieval India*, p. 445.





dissatisfied with Sikandar's policy of religious persecution heartily hated the Lodi government and under the valiant Rana Sanga of Mewar (1509-27) a determined revivalist attempt was launched. There was an indecisive encounter between the forces of the Rana and Ibrahim but before a second show-down took place, India was invaded by Babar.

VII. THE ERA OF TRANSITION FROM TURKO-AFGHAN TO MUGHAL RULE, FROM FIRST BATTLE OF PANIPATH TO SECOND BATTLE OF PANIPATH (1526-56)

The battle of Panipath (1526) and the foundation of the fresh alien rule of the Timurids caused widespread dismay among the indigenous leaders and a determined effort was made to chase the Mughals out of India. Those who admire Babar as an accomplished and humane ruler should not lose sight of the fact that he was a ruthless invader and conqueror and that the depredations of his soldiery caused great havoc throughout a large part of Northern India. Guru Nanak, the founder of Sikhism, voiced the sentiments of his people in his little known verse where he says that "God protected Khorasan, Babur's home while Hindusthan was terror-stricken. The Mughals came as messengers of Death." (Cited from Prof. Balwant Singh.)

Babar's autobiography bears a close testimony to this. "When I first arrived at Agra", he writes, "there was a strong mutual dislike between my people and the men of the place." Both Afghans and Hindus combined against him and in this sense the battle of Khanwa was a forerunner of the Great Revolt of 1857. One of the foremost leaders of resistance was Hassan Khan Mewati, a scion of the Khanzadas of Mewat whom Babar describes as 'the prime mover and agitator in all these confusions and insurrections'.<sup>42</sup> The principal men who joined the battle against Babar apart from the leader Rana Sanga, were Silaheddin, Rawal Udai Singh of Nagari, Medini Rai, Hassan Khan Mewati, Barmal Idari, Narpal Hada, Sattervi Kachi, Dharn Deo, Narsing Deo and Mahmud Khan Lodi. These names reveal the nationalist character of the resistance against Babar. The battle ended in Babar's victory and in the words of the victor, hillocks were formed of the slain and towers raised of their heads. Among the killed were Hassan Khan Mewati, Rawal Udai Singh, Rai Chandrabhan Chauhan, Manikchand Chauhan, etc. The victory of Khanwa was followed by the capture of Chanderi, the stronghold

<sup>42</sup> *Memoirs of Babar*, translated by Leyden and Erskine, p. 247.

of Medini Rai which stoutly resisted for a number of days and then its garrison died to a man in its defence. "When further resistance was hopeless, the pagans in a state of complete nudity, rushed out to attack us, put number of my people to flight and leaped over the ramparts. The reason of this desperate sally was that they had put to death the whole of their wives and women."<sup>43</sup> The gallant Rana succumbed to his injuries and heart-break soon after.

The Afghan revival under Sher Shah can be interpreted as a triumph of Indo-Muslim nationalism which certainly drew part of its strength from the moral support of the indigenous Hindu population. It is a fact that the Surs did not quite follow the intolerent religious policy of their Afghan predecessors, the Lodis, as is attested by Sher Shah's partly secular policy and Adil Shah's absolute reliance on his Hindu General Himu. But there was nothing of the broad nationalism of Akbar in the Sur statecraft and there is now a growing realisation that Sher Shah's liberalism has so far been rather overrated.

With the victory of Akbar at the Second battle of Panipath a new era begins in Indian History. Opinions may vary whether we can trace the beginning of a modern age with the year 1556, but the fact remains that in course of a few years a well-nigh revolutionary change came to take place in the attitude of Moslem ruling class to their non-muslim subjects. This change may have been actuated by expediency or an inward conviction on the part of Akbar, but there is no gainsaying the fact that when the liberal and benevolent character of the Government became known the age-long resistance movement gradually ceased to exist. We do not hear of insurrections in Mewat, Gwalior or Rohilkhand. Except in Mewar nowhere was there any stiff resistance of a nationalist character against Akbar's authority or his policy of expansion. The Rajputs soon became partners in his grand work of Indian unification and this alone highlighted the national character of the Timurid monarchy. It is curious that Akbar's imperialist activities were conducted more against Muslim Sultanates (Such as Gujarat, Bengal, Kashmir, Sindh, Beluchistan, Ahmadnagar and Khandesh) than against Hindu princes (Gondwana and Mewar being exceptions). Orissa, when conquered by him, had become the refuge of Afghan power. This liberal-popular character of the Mughal regime was sustained till the early part of the reign of Aurungzeb.

<sup>43</sup> *Ibid.*, p. 325.

The history of the resistance movement during Turko-Afghan period must needs be scrappy and must appear full of gaps for lack of suitable materials. As Vincent Smith pointed out some thirty years back 'no voice has come from the grave'. Yet whatever records of these continual efforts have come down to us, they are to be found in the pages of the Muslim Chroniclers of the period, who never suppressed truth deliberately as is wont with the present-day propagandist historians. It is as resistance movements that these should be studied and admired and not as conflicts between two great Asian religious and social systems.

FOOD AND DRINK IN ANCIENT INDIA FROM  
PĀṆINI'S AṢṬĀDHYĀYĪ<sup>1</sup>  
(ANNA-PĀNA)

By VASUDEVA S. AGRAWALA

THE *Aṣṭādhyāyī* supplies evidence for reconstructing an important chapter on the history of food and drinks in ancient India. Food is called *anna*, and the eater of food *annāda* (III. 2.68). The word *bhakta* in the *Aṣṭādhyāyī* has two meanings, (1) food and (2) boiled rice. In sūtra VI. 2.71, भक्ताभ्यास्तदर्थेषु where names of edible articles are meant *bhakta* means 'food in general.' The word in this sense also occurs in the Jātakas (*yāgu-bhattādīni*, Takkala Jāt. IV. 43) and the *Arthasāstra* (Text p. 118). A servant or wage-earner whose remuneration was given to him daily in the form of food was designated *bhākta* or *bhāktika* in the time of Pāṇini. This phenomenon seems to have been true in the case of agricultural labour. The *Arthasāstra* says that food and wages (*bhakta-vetana*) were paid to the artisans, but food only to farm labour (*Arth.* Text, p. 118). Patañjali is even more specific: 'The meaning of the root *kṛṣhi* is not restricted merely to the actual operation of ploughing, but it also implies all adjunct efforts by way of providing food (*bhakta*) to labour, seed and bullocks, etc., all of which together contribute to the complete fulfilment of the sense of the verb *kṛṣ* (*Bhāṣya*, II. 330 यदसौ भक्त-बीज-बलीवर्देः प्रतिविधानं करोति स कृष्यर्थः) The other sense of *bhakta*, viz., boiled rice is seen in sūtra IV. 4. 100 भक्ताणः which teaches a suffix to denote the name of rice that is good for preparing *bhakta*. *Kāśikā*'s

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<sup>1</sup>From the author's Thesis on 'Pāṇini as a source of Indian history.'

examples भाक्तः शालिः and भाक्तस्तण्डुलः show that *bbakta* here stands only for boiled rice, a meaning which it still retains in the word भात in many Indian languages.

*Classification of foods.*—Pāṇini also gives us an insight into the principle of classifying foods on the following lines. In a short innocent-looking sūtra, which has been the subject of so much controversy, Pāṇini explains the meaning of *bhojya* : भोज्यं भक्ष्ये (VII. 3. 69)

It means that the word *bhojya* is irregularly derived (निपात्यते) in the sense of an edible thing (*bhakṣya*). On this Kātyāyana raised an objection that it was a mistake to use *bhakṣya* as a synonym of *bhojya*, since *bhojya* includes all articles of diet, both solid and liquid, whereas *bhakṣya* denotes only solid food. Kātyāyana suggested that the proper word for Pāṇini to express the general sense of *bhojya* was *abhyavahārya*, fit to be eaten, which conveys an equally wide sense to cover both solid and liquid foods. Patañjali<sup>2</sup> disagrees with Kātyāyana and defends Pāṇini by saying that in such older examples as *ab-bhakṣa* (one who *eats* water) and *vāyubhakṣa* (one who *eats* air) even non-solid substances occur as the objects of *eating* (*bhakṣaṇa*), and hence Pāṇini's idiom in equating *bhojya* with *bhakṣya* is unobjectionable. All subsequent commentators have accepted Patañjali's liberal interpretation of *bhakṣya* in this sūtra, viz., that it stands both for solid (*kṣara-viśada*) and liquid (*drava*) foods, e.g., the *Kāśikā* :—इह भक्ष्यमभ्यवहार्यमात्रम्। Dr. Goldstücker, however, raised his voice of dissent against Patañjali and maintained that 'in Pāṇini's time, which preceded

<sup>2</sup> VII. 3. 69.; *vārttika* भोज्यमभ्यवहार्ये। *Bhāṭya* : Objection : भोज्यमभ्यवहार्य इति वक्तव्यम्। इहापि यथा स्यात्। भोज्यः सूपः। भोज्या यवाभूरिति। किं पुनः कारणं न सिध्यति। भक्षिरयं खरविशदे वर्तते तेन द्वे न प्राप्नोति।

*Reply*—नावश्यं भक्षिः खरविशद एव वर्तते। किं तर्हि। अन्यत्रापि वर्तते। तद्यथा। अन्नभक्षः वायुभक्ष इति। (*Bhāṭya*, Vol. III. p. 333.)

the classical epoch, *bhaksya* must have been used as a convertible term for *bhojya*; while at Kātyāyana's period, this rendering became incorrect, and the sūtra certainly needed a correction (*Pāṇini and his Place in Sanskrit Lit.* p. 97). But it is doubtful if Dr. Goldstücker's statement (भक्ष्य-both solid and liquid food) is true for the whole of the *Aṣṭādhyāyī*. In sūtra, *Bhaksyeṇa miśrikaraṇam* (II. 1. 35) as read with *Samskṛtam bhakṣāḥ*, IV 2. 16 *bhaksya* seems to denote solid food only and not liquids; as is evident from the illustration in the *Bhāṣya*, viz., गुडेन संसृष्टा, गुडसंसृष्टा, गुडसंसृष्टा घाना गुडवाना : । (I. 387), which is accepted by all subsequent commentators, (*Kāśikā*, IV. 2. 16 : खर विशदमभ्यवहार्यं भक्षमित्युच्यते; see also sūtra II. 1. 35). In this particular sūtra *bhaksya* cannot be said to be strictly synonymous with *bhojya*, if, as rightly argued, *bhojya* included both liquid and solid diets. In contrast to this, there is another sūtra, viz. पल्लसूपशाकं मिश्रे (VI. 2. 128) (which must be interpreted with the sūtra भक्ष्येण मिश्रीकरणं) where Pāṇini himself has given both solid (as sesamum and vegetables) and liquid (*sūpa*) articles of food as examples of *bhaksyas*.

The correct view therefore seems to be that *bhaksya* has a two-fold sense in the *Aṣṭādhyāyī*, a more general sense to include both solid and liquid foods, as in sūtra VII. 3. 69, and a restricted one for solid food only elsewhere. As for the contention of Dr. Goldstücker (*ibid.*, p. 97) that in the classical language *bhaksya* is different from *bhojya* and applies to solid food only, we submit the following three examples from Kautilya, where exactly as in Pāṇini both meanings prevail side by side :—

- (a) *Māmsa-surā-bhaksya-bhojana*. (*Arth.* Text. i.e., eating of meat (*bhaksya*) articles and drinking of liquors (*surā-bhojana*).

(b) *Sūda bhakṣakāro vā . . bhakṣa-bhojanam yācet* (P. 239), i.e., a cook or sweet-maker may request for some *bhakṣa* and *bhojana*.

(c) *Bhakṣyeṣu smarati* (p. 252), i.e., the king remembers (that courtier) while taking his food.

In the above extracts (a) and (b) distinguish between the meanings of *bhakṣya* and *bhojya*, while (c) uses *bhakṣya* as synonymous with food in general. It is this latter sense that is applicable in Pāṇini's sūtra VII. 3.69.

*Various methods of Preparation.*—

(i) *Misrīkaraṇa*. Preparation of mixed dishes. Some of them as mentioned by Pāṇini were *palala* (pounded sesamum), *sūpa* (pulse juice), and *sāka* (vegetables) with which were mixed relish-giving articles like *ghṛta*, *guḍa*, etc., According to *Kāśikā's* gloss on VI. 2. 154 मिश्रं चानुपसर्गमसम्बन्धौ *guḍa*, *tila* and *ghṛta* were examples of mixing (*misra*) articles. Suitable new combinations with the principal *bhakṣya* foods were coming into vogue.

(ii) *Samśṛṣṭa* (IV. 4. 22). The sūtra *Samśṛṣṭe* provides that the suffix *ṭhak* is added to a word when the sense is 'dressed therewith.' According to Pāṇini himself *cūrṇa*, i.e. wheat flour (IV. 2. 23) *lavaṇa*, salt, (IV. 2. 24) and *mudga* pulses (IV. 2. 25) were ingredients used 'in dressing therewith.' Kātyāyana perhaps too subtly, thinks that there is something wrong in salt being considered as a 'dressing' article since it is a quality (*guṇa*) being one of the six *rasas* (tastes). (Cf. Kātyāyana on IV. 4. 24 ; II. 330). But Pāṇini considers salt not so much as an abstract quality as a *pañya* or saleable article cf. *lāvanika*, a dealer in salt sanctioned by sūtra IV 4. 52.

(iii) *Vyañjana and Upasikta*. Whereas *misra* articles include condiments the mixing of which depends on the option of the user for flavouring his food,

*vyāñjanas* or seasoning ingredients were those without which the preparation of a particular dish would be considered incomplete or deficient in taste. According to Pāṇini the purpose of *vyāñjanas* was that of *upasecana* (seasoning for improving taste, IV. 4. 26, *vyāññanairupasikṭe*. Patañjali on II. 1. 34 (*Annena vyāññanam*) treats *dadhi* as an *upasecaka* and *Kāśikā's* gloss on Pāṇini II.4.12 gives curds and *ghṛta* (*dadhi-ghṛtam*) as examples of *vyāñjana*. The nature of any dish determines whether a particular article bears to it the relation of a *vyāñjana* or *miśri-karaṇa*, i.e., an indispensable or optional ingredient of mixing; for example, *Kāśikā* treats *ghṛta* both as a seasoner and as a *miśra* article (*Kāśikā* on VI.2.128 and 154).

(iv) *Samskṛta*. This method of preparing articles of diet is dealt with in the following sūtras :

(a) संस्कृतं भक्षः IV.2.16.

(b) संस्कृतम् IV.4.3.

According to Patañjali *samskṛta* is that which can be eaten direct from the place of its preparation, as the groats ground in a hand-mill are ready-made (*samskṛta*) since they can be consumed directly without needing to undergo any further processing. But we cannot speak of barley as being made *samskṛta* in the pounding mortar since they require further boiling or steaming (*Bhāṣya*, II.307; IV.3.25). As an example of the former *Kāśikā* gives sweet bread baked in an oven (*Bhrāṣṭra apūpa*, IV.2.16).

In Pāṇini's time ready-made foods (*samskṛta bhakṣas*) were named on the basis of (1) their manner of cooking and (2) their principal ingredients. His own example of the former is meat roasted on spike (*sūlya māṃsa*) or anything made in a frying pan (*ukhya*). Of the latter he mentions curds (*dadhi* IV.2.18), butter milk, i.e., curds after separation of butter (*udasvit* IV. 2. 19) and milk (*kṣīra* IV.2.20) as dressing ingredients. Of the different kinds of gruel,



the one prepared in milk was called *kṣaireyī Yavāgū* to distinguish it from the other one prepared only in water. These sūtras also show the extensive use of milk products in the dietary of the people, and together with the numerous other references in the sūtras bearing on cow-economy they hint at a flourishing dairy industry.

*Food Products.*—A list of the principle food products and their preparations mentioned in the *Aṣṭādhyāyī* is given below :—

A. *Grains.*

(i) *Śālī* (V.2.2.).

(ii) *Mahāvrihi* (VI.2.38). It was one of the finest variety of rice mentioned by Caraka in his list of the principle kinds of rice (*Caraka*, Nidānasthāna, IV. 6). Suśruta mentions *Mahāśālī*. (*Sūtrasthāna*, 46.7), which was probably kindred with *mahāvrihi*, as a native of Magadha. Patañjali speaks approvingly of the *śālī* rice grown in Magadha (तानेव शालीन् भुञ्जमहे ये मगधेषु, I. 19.). The variety seems to have survived for more than a thousand years. According to Hiuen Tsang's testimony : ' There is an unusual sort of rice grown here (Magadha), the grains of which are large and scented and of an exquisite taste. It is specially remarkable for its shining colour. It is commonly called "the rice for the use of the great." (Beal, *Siyuki*, II. 82). This appears to be the rice called *Mahāśālī* and *Sugandhika* (Julien) Hwui Lih, the biographer of the Chinese Pilgrim, states that the *Mahāśālī* rice was grown only in Magadha and that Hiuen Tsang, during his stay at Nālandā, was entertained with this superior kind of rice (*Nalanda* by H. D. Sankalia, pp. 192-3). Pāṇini's acquaintance with the *mahāvrihi* rice of Magadha reflects another touch of his close knowledge of the Prācyā country.

(iii) *Hāyana* (III.1.148) a kind of *vrihi*, is also included

by Charaka<sup>3</sup> amongst the nine varieties of well-known rice. 'In the Kāṭhaka Saṁhitā and the Śatapatha Brāhmaṇa the term appears as a designation of a species of red rice' (*Vedic Index*, II. 502).

(iv) *Yavaka* (V. 2.3.). Both Pāṇini and Caraka mention *yavaka* as the name of a rice. Pāṇini V.4.3 mentions in the *gaṇapāṭha*, *yava vr̥hisnu*, from which we get *yavaka*. The same *gaṇa* also contains *Jīrṇa śālīshu*, from which we get *Jīrṇaka* as a kind of rice, probably the same as *jūrṇa* in *Caraka*, Sūtra-sthāna, XXVII.18.

(v) *Śaṣṭikā* (V. 1.90). So called because it ripened in sixty days ; one of the best variety according to medical authorities (*Caraka*, Sūtra, XXVII.13).

(vi) *Nīvāra* (III.3.48), wild and inferior variety.

Pāṇini refers to a river called Devikā (VII.3.1) on which Patañjalai remarks that a special kind of rice was grown near the banks of the Devikā called *Dāvika-kūla Śālī* (III. 316)\*.

2. *Pulses*. *Mudga* (IV.4.25) ; *Māṣa* (V.1.7 ; V. 2.4) ; *Kulattha* (IV. 4.4., *Dolichos uniflorus*, given as an article to be eaten with food (*samskāra* *dravya*). *Caraka* enumerates *kulattha* among pulses (*Śamīdhānya*, sūtrasthāna, XXVII. 26).

3. *Other Grains*. *Yava* (barley, V.2.3.) ; *Yavānī* (inferior kind of barley, IV.1.49) ; *Aṇu* (V.2.4) a small grain (*Panicum miliceum*) which is the principal food of the poorer people in the Sindh-Sagar doab and other parts of

<sup>3</sup> हायनक-यवक-चीनकोदालक-नैषधेत्कट-मकुन्दक-महाव्रीहि-प्रमोदक-सृगन्धिकानां नवानाम् Also Sūtra-sthāna, XXVII.12, where the name is *bāyana* as in Pāṇini, not *bāyanaka*.

\*The Devikā was the old name of river Deg flowing through Sialkot, Gujranwala and Sheikhupura districts (ancient Madra). On its banks is still grown an excellent variety of rice, known to the modern Panjabi as the rice from Kamoke in Gujranwala and Muridke in Sheikhupura. I owe this information to Prof. Jagannatha of Lahore. Cf. J.U.P.H.S., Vol. XVII, Pt. II, pp. 76-79.

the Pufijāb ; *Gavedhukā*<sup>4</sup> (IV.3. 136), *Coix barbata*, boiled with rice or barley in preparing gruel ; *Tila* V. 2.4 ; 7). B. Prepared Food (*Kṛtāṇna*).

(1) *Odana* (IV.4.67.), boiled rice, also called *bhakta* (IV.4.100), must have been a favourite diet, since as many as six varieties of rice are given in the *Aṣṭādhyāyī*. According to Pāṇini some varieties were considered specially good for preparing *bhakta* (IV.4.100). *Odana* was either boiled alone in water, called *udakodana* or *udodana* (VI. 3. 60), or prepared in combination with meat (*māmsodana*, VI.4.67). Vegetables and soups (*śāka*, *sūpa*, VI. 2. 128) seem to have been other ingredients eaten with boiled rice. Charaka giving a list of thirtyfive kinds of rice prescribes the use of *ghṛta*, *taila*, *phala*, *māṣa*, *tila* along with *odana* (*Sūtras-thana*, XXVII.257). In India *odana* is most commonly eaten with *sūpa* of various pulses. According to the *Mahaummaga Jātaka*<sup>5</sup> the food of a labourer consisted of *bhatta* from barley eaten with *sūpa*. According to Patañjali *odana* made a decent dish to feast Brāhmaṇas (I.467) and friends (I.182). He repeats several times the phrase, *Vindhyo vardhitakam*, (I. 327), comparing humorously the heap of rice served on a plate to Mount Vindhya.

Bhāṣya. I. 220, *Ekaśca taṇḍulaḥ kṣutpratighātesamart-has tat samudāyaśca vardhitakam samartham*. The sight of *Vindhya vardhitaka* is a phenomenon of daily occurrence in the eastern districts where rice is the staple food.

<sup>4</sup> Kātyāyana considered the reading of *Gavedhukā* in the Bilvādi gaṇa (IV.3.136) as authentic (*Bhāṣya* II. 323). The same gaṇa also contains *godbūma* and *masūra*.

<sup>5</sup> Cf. *Mahaummaga Jātaka*, Vol. VI. p. 372 : *muṭṭhim muṭṭhim katvā appasāpaṃ java-bhattam bhūñjamānaṃ*. Cf. also *Jāt* Vol. I. p. 486 describing a *bhatta* of inferior rice for poor men (*taṇḍula—maṇassa bhattam*).

(2) *Yavāgū* (IV.2.136) Barley-gruel was a popular food like *odana* as can be gathered from its repeated mention in the illustrations to sūtras. The Jātakas mention *Yāgu* as a popular food. Patañjali considered *yavāgū* a liquid diet (Bhāṣhya on VII.3.69). Pāṇini specially mentions the *yavāgū* eaten in the *Sālva* country (*Sālvikā Yavāgū*) which like the breed of *Sālva* bulls enjoyed much wider reputation (IV.2.136 *Go-yavāgvośca*). The ancient *Sālva Janapada* consisting of a confederacy of six members states most probably coincided with the vast territory stretching from Alwar to Jodhpur in Rajputana. People in these parts are still inordinately fond of eating gruel, which is of two kinds, viz., (1) *lapsi*, that is sweet in taste and eaten by the rich, and (2) *rābari*, that is saltish and prepared by the poor. Pāṇini also mentions *ushṇikā* in sūtra V. 2. 71 as a *samīna* word, which according to Kāśikā was the name of a *Yavāgū* of a very thin consistency. (*Alpānnā yavāgūruṣṇiketyucyate*). In sūtra III. 2. 34 Pāṇini derives *nakham-pachā*, 'nail-scathing.' Kāśikā connects *nakhampachā* with *yavāgū*. We know from other sources that *yavāgū* was of two kinds, *peyā* and *vilepī*. The *peyā* or thin variety was drunk like *saktu* dissolved in water, while *vilepī* or paste-like *yavāgū* was licked with fingers of the hand. The *ushṇikā* in sūtra V. 2.71 must be the *peyā* variety whereas the *nakhampachā* kind of *yavāgū* of sūtra III. 2. 34 was *vilepī* which scotched the finger ends when eaten hot.

(3) *Yavaka* (V.4.29). Patañjali throws welcome light on the preparation of *yavaka*. According to him *yavaka* was made first by pounding barley with pestle and mortar to remove the chaff, and then boiling the pearl-grains in water (or in milk with sugar added to it). Caraka rightly calls *yavaka* a steamed food (स्विन्न भक्ष्य Sūtra-sthāna, XXVII. 259). The Arthaśāstra

lays down that prepared *yavaka* must weigh twice the original quantity of barley given to the cook (Arth. Text. p. 95).

(4) *Piṣṭaka* (IV.3.147). *Piṣṭa* (IV.2.146) denoted the ground paste of any grain; articles prepared by mixing *piṣṭa* were generally called *piṣṭamayam*. *Piṣṭaka* on the other hand was a special preparation, probably the cakes made of powdered rice. Suśruta counts *piṣṭaka* among prepared dishes (*krītāṇṇa varga*) (Food by G. P. Majumdar, Indian Culture, I. 413).

(5) *Samvāva* (III.3.23). Kullūka explains *samvāva* as a sweet preparation made from *ghṛta* milk, *guda*, and wheat-flour (Manu, V.7), almost the same as modern *curmā*. Suśruta also includes it among confectioneries (Majumdar, *ibid*, p. 413).

(6) *Apūpa* (V.1.4)—sweet cakes of wheat flour and *ghṛta*, a dainty confectionery prepared even now. The Kāśikā mentions oven-baked *apūpas* (IV.2.16). The Cāndra Vṛitti and the Kāśikā read *abhyūṣa* (variant *abhyoṣa*) in the *apūpādi gaṇa*.<sup>6</sup> It must have been an ancient food since the Kāmasūtra also mentions *abhyūṣa-khādikā* as the name of a game in which boys and girls took part by eating the *abhyūṣa* together (Kamasūtra, ch. IV.).

(7) *Saktu* (VI.3.59). *Saktu* (groats) is a popular food all over north India. Pāṇini mentions *saktu* mixed with water (*udakasaktu* or *udasaktu*), but Patañjali mentions *dadbhisaktu* i.e., groats with *dadbi* as the seasoning ingredient (I.149; I. 1. 57). *Bhrāṣṭra* or the frying-place (VI.2.82) was the place for preparing *saktu*.

<sup>6</sup> Also *prithuka*, boiled rice, crushed and dried (*ciduve*), cp. Kāśika, *guda-prithukāb*, II. 1.35.

Amara: *Apakvam paulir-abhyūṣaḥ*, i.e. half-ripe corn fried in fire.

(8) *Kulmāṣa* (V.2.83.). Pāṇini mentions *kulmāṣa* as a food which was ceremoniously eaten on a particular day in the year (*tadasminnannam prāye sanjñāyām*, V.2.82). The particular full moon on account of its association with *kulmāṣa* was known as *kaulmāṣī Paurṇamāsī*.

What was *kulmāṣa*? In the Nirukta<sup>7</sup> *kulmāṣa* is an inferior food, which is confirmed by the Chāndogya Upaniṣad where the people of Ibhyagrāma (richmen's village) in Kurukshetra eat *kulmāṣa* after the crops had been destroyed by hail storms (I.10.2). The *Kumāsa-piṇḍa jātaka* (No. 415) refers to it as the coarse diet of the poor (*dalidda*) workman which he could carry about in the form of balls or lump, and to which on account of his poverty he could not even add a little oil and jaggery (*atelam, alonikam*).<sup>8</sup> *Kulmāṣa* thus appears to have been a coarse thick gruel of almost solid consistency prepared by stewing beans<sup>9</sup> or maize, or any inferior grain in covered vessel with a little water (*appodaka*) and adding also *guda* and fat if one could afford. *Yavaka* was different from *kulmāṣa* in that it was first pounded in a mortar (thus made *aulūkebala*, Bhāṣya, II, 307) and then boiled like the latter. Caraka also considers *kulmāṣa* as a *svinna-bhakṣya* steamed food, heavy to digest

<sup>7</sup> कुलमाषान् चिदाहर इत्यवकुत्सिते Nir. I.4. Dr. Sarup renders it as sour gruel (Cf. Amara, *kulmāṣa yavaka*: later Koṣas add *Kanjika yavaka*. Also Vedic Index where the meaning of sour-gruel is accepted.

<sup>8</sup> Jāt. III. 406; on p. 408 *sukebhāya alonikāya ca . . kummāsapīṇḍiyā*. The commentary explains *sukebhāya nisnebhāya*, and *alonikāya* as *pbāṇita virahitāya*, adding that *alonika* meant *nippbhāṇitattā*, absence of jaggery.

<sup>9</sup> Kāśikā (also Candra) includes *kulmāṣa* in the *gudādi* group (IV.4. 103) and illustrates it as कुलमाषिक मुद्ग, i.e., मुद्ग pulses suitable for making *kulmāṣa*. Cakrapāṇi on Caraka, *sūtrasthana*, XXVII. 260, explains *kulmāṣa* as *yavapiṣṭam ushodakasikṭam īṣatsvinnam apāṇīker tam kulmāṣamābuh*.

and dry in effect (Sūtra-sthāna, XXVII.259). The *kaulmāṣī tithi* of Pāṇini most probably coincided with the full moon day of Caitra when some kind of kindred perparation forms the ceremonial food. Kātyāyana refers to the *vaṭakini* day which must be the same as the full moon day of Kārttika when cakes of māsha paste (*vaṭakas*) are eaten as a matter of ceremony.

(9) *Palala* (VI. 2.128). A sweetmeat made of pounded sesamum and sugar or *guḍa*, as illustrated by Kāśikā, *guḍena miśraṁ palalam guḍa-palalam* (VI.2.128) and *tila-palalam*, i.e. the *palala* food made from *tila* (VI. 2. 135) Its modern equivalent is *tilakuṭa*.

C. *Sweets*. Pāṇini mentions the following sweets :—

(i) *Madhu*, honey from which is derived the general term *madhura* (V. 2.107) denoting all confectioneries. Honey prepared by the common bee is referred to as *kṣandra* (IV.3.110) treated as a *saṁjñā* word.

(ii) *Guda* (IV.4.103), molasses, a universal product from sugar-cane juice in Indian villages. Pāṇini's phrase 'excellent for making *guḍa*' (*guḍe sādhu*) refers to some special variety of sugar-cane yielding better quality of *guḍa*. Even now this consideration prevails with the farmers at the time of selecting sugar-cane seed for the next crop. Pāṇini refers to vast sugar-cane plantations as *Ikṣu-vaṇa* (VIII. 4.5.).

(iii) *Phāṇita*, implied as a counter-example in sūtra VII.2.18 which mentions *phāṇṭa Phāṇita* denotes inspissated juice of sugarcane boiled down to thick consistency, a preparation now called *rāb* in which crystallisation sets in after some time of boiling.

(iv) *Śarkarā*, granulated sugar prepared from sugarcane.

D. *Milk Products*, called *gavya* and *payasya* (IV.3.160). The Ashtādhyāyī mentions curds, milk and butter-milk (IV.2.18) as occupying an important place in the preparation of food articles.

*Dadbipayasī* (II.4.14) was an equivalent of modern *dāḍha-dabī*. *Phāṇṭa* is given in sūtra VII.2.18 in the sense of 'made without an effort' (*anāyāsa*). The *Kāśikā* understands it as a 'a hot decoction,' but the epithet *anāyāsa* points to the old meaning in the *Śatapatha Brāhmaṇa* (III.1.3.8), viz., creamy butter produced fresh (*ayātayāma*) as opposed to *ghṛta*. A new classical word, *haiyamgavīna* (Pāṇini V. 2. 23) had come into use, equivalent to *navanīta* or butter produced by churning curds from the previous day's milk, a practice universally followed in the rural ghee industry.

Pāṇini has an interesting sūtra *Pānam dese* (VIII.4.9) which apart from its grammatical interest (i.e., cerebralisation) acquaints us with the fact that different countries derived their names from the favourite drinks of their people. Of the four illustrations on this the first cited by the *Kāśikā* and repeated in the *Cāndra vṛitti* (VI. 4.109) refers to the people of the *Uśīnara* country as being fond of drinking milk (*Kṣīrapāṇā Uśīnarāḥ*). The information seems to be grounded in fact. *Uśīnara* or the ancient *Śibi Janapada* had its capital at Shorkot near the left bank of the lower Chenab, and roughly corresponded with parts of Jhang, Multan and Montgomery districts famous for their breed of cows.

The *Mahābhārata* mentions *mathita* (whey) as a favourite drink of the people in *Vāhika* country, and *Patañjali* refers to *māthitika* shop-keepers selling *mathita* (III. 328, *mathitam paṇyam-asya māthitikaḥ*).

E. *Vegetables and Fruits*. Among auxiliary articles of food Pāṇini refers to *sāka* (leafy vegetables), cooked vegetables (*bhājī*, IV.1.42; also called *śrāṇā* in sūtra IV.4.67), soups (*sāpa* VI.2.128) which must have been prepared from pulses like *mudga* and *māṣa*. Mention is also made of the practice of munching with food such digestive roots as radish and ginger called *Upadamśa*



(III.4.47). Among fruits mango (*āmravaṇa*, VIII.4.5) and *Jambū* (rose-apple, IV.3.165) are mentioned.

Generally the name of the tree was also the name of the fruit (IV.3.163, *Phaleluk*).

*Cooking and other customs.* Cooking is called *pakti* (III.3.95). Frying-pans were used for cooking (*ukhā*, *ukhya*, IV.2.17). The process of roasting on spikes on referred to as *sūlā-karoti* (V.4.65) and articles so roasted were known as *sūlya* (IV.2.17). The commentators in both the sūtras understand this process to apply only to meat. Pāṇini explicitly refers to *māmsa* in sūtra IV.4.67. Kauṭilya also mentions shops of meat-sellers (*pakva-māmsika*, p. 144). They must be preparing *sūlya* articles of food.

The cooks in the time of Pāṇini derived their designations from two factors, firstly from their skill in preparing particular dishes, and secondly from the quantity which they were capable of cooking. The first point is referred to in VI.2.129, in which the names of various classes of cooks are presumed, as *deva-sūda* and *bhājī-sūda*, i.e., cooks attached to temples and persons who were expert in the cooking of vegetables.<sup>10</sup>

The practice of designating cooks on the basis of their capacity to cook a particular measure or quantity of food is referred to in sūtra V.1.52. (संभवत्यवहरति पचति) This may have been a criterion to determine their wages and worth for employment in domestic and army kitchens. Pāṇini himself speaks of those who were capable of cooking an *āḍhaka*, *ācita* or *pātra* measure and therefore distinguished as आढकीन, आचितीन and पात्रीण respectively (V.1.53). Kātyāyana in a special vārttika refers to the cooking of *droṇa*-measure from which a female competent to cook so much was known as *drauṇī* or

<sup>10</sup> Cf. Artha. Text, p. 239, referring to *sūda* and *bhākshakāra* rendered as sauce-maker and sweetmeat-maker, respectively. The Kāśikā understands *Devasūda* and *Bhājīsūda* as place names.

*drauṇikī* (V.1.52; II.352). Provision is also made for deriving names of cooks on the basis of cooking even higher weights, i.e. *dvyāḍhakī* *dvyāḍhakikī*, *dvyāḍhakīnā* (Part.II.352; V.1.54). The popularity of these epithets is seen from another rule in which Pāṇini gives as many as four variant forms for designating one who could cook a couple of *kulija* measure, e.g., द्विकुलिजिकी, द्विकुलिजीना, द्विकुलिजा, द्विकुलिजिकी (V.1.55).

The same principle held good in the case of utensils which were named from the quantity that they could contain (*sambhavati*, V.1.52) as *prāsthika*, *kaṇḍavika*, *khārīka*, or that could be cooked in them (*Parimāṇe pacati*, III.2.33). The custom served a practical need in the economy of village life. At the time of communal feasts bigger utensils and jars are borrowed from other families both for cooking and for storage, and then it is found convenient to refer to those vessels by such names.

*Customary food payments.* The information furnished by the following sūtra is of special interest : तदस्मै दीयते नियुक्तम् IV.4.66. It teaches that the affix *ṭhak* comes after the name of a food in the sense of 'to whom this is to be given daily by virtue of an appointed custom.'

The word *niyukta* is vital to the discussion. It comes from *niyoga*, which according to Patañjali denoted an obligatory act or payment in respect of another person partaking of the nature of a debt.<sup>11</sup> For example, if one had engaged a servant for a *paṇa* a day, the *paṇa* was a *niyukta* charge the payment of which at the end of the day was obligatory, and not optional. We must imagine those circumstances in which an article of food

<sup>11</sup> *yad-yasya niyogataḥ kāryam-ṇam tasya tadbbhavati.* (Bhāṣya I. 391; in the course of an explanation of the varttika on sūtra II.1.43).

can become due in a like manner. We read in the Arthaśāstra of *bhakta-karmakaras*, i.e., servants engaged on the stipulation of receiving daily food. In the actual village economy there has always existed a custom of giving a portion of the mid-day meal to certain domestic servants and menials, like the scavenger and the water-carrier, etc. Their daily wages in respect of the services rendered by them to the various families consist only of food articles which they are required to collect in the course of the day from the number of houses served. The village Brāhmaṇa also by virtue of his privileged position as Purohita gets a portion called *agrāsana*, which is no doubt referred to in the illustration *āgrabhojanika* (*agre bhojnam asmai niyuktam dīyate*) cited by the Kāśikā. In this case the members of the family cannot partake of their food unless the *āgrabhojana* has been set apart. The point to remember is that the giving of *niyukta bhakṣas* is neither of the nature of alms (*bhikṣā*) nor depends on option, its payment is an obligatory charge. Pāṇini's own examples of obligatory food payments (*niyukta bhakṣas*) are cooked vegetables (*śrāṇā*), meat and boiled rice (*māmsa*, *odana*, IV.4.67) and *bhakta* (IV.4.68). A servant whose daily apportioned share consisted of only vegetables was *śrāṇika*, or *śrāṇikī* in the case of a female, and so for meat *māmsika*, for rice *odanika*, and for *bhakta bhāktika*, the last corresponding to *bhakta-karmakara* of Kauṭilya receiving daily full meal. But the question arises how could vegetables, etc. singly make a complete (*āśitambhava*, III.2.45) food for a servant who received vegetables or meat only from one house. The reply is that the same person would be a *śrāṇika* in respect of one family, *odanika* in respect of a second, and *āpūpika* in respect of a third. For example a female (*udabārī*) agreed to take vegetables from one house, soup from another, meat and rice from a third and so on,

and thus she earned her complete meal. If she served a confectioner (*āpūpika*) she would naturally receive an *apūpa* a day as her payment for work, and with reference to that particular house she would be called *āpūpikī*, i.e., a female receiving an *apūpa* every day.

Such an arrangement alone could have been responsible for the origin of different designations of servants based on the names of the different articles of food of *niyukta* share. This is a living institution in north Indian villages up to this time where cash payment is practically unknown for domestic and menial service rendered.

*Invitations.* Pāṇini distinguishes between two kinds of invitations to dinner, viz., *nimantraṇa* and *āmantraṇa* (III.3.161). According to Patañjali the former is an invitation to partake of *havya* and *kanya* foods, the acceptance of which is obligatory on the invited Brāhmaṇa, and refusal would entail sin. *Āmantraṇa* on the other hand is a friendly invitation and therefore optional (*āmantraṇe kāma-cāraḥ*, II.165).

Among food habits reference is made to fasting (*vrata*, III.1.21), satiety (*subhita*, II.2.11) and gluttony (*audarika*, V.2.67, *ghasmara*, *admara*, III.2.160).

*Taverns and drinks.* Urban culture is reflected through several institutions, as shops offering meat and rice (*māmsaudana*), confectioners (*āpūpika*, IV. 4.51), theatrical shows (*prekṣā*, IV.2.80), and performances by various artists (*śilpina*) like the instrumentalist (*vādaka*) musician *gāyana*, III.1.147), and dancer (*nartaka*, III.1.145); but none of them so typically represents the climax of fashionable society as the vintners' (*śauṇḍika*, IV.3.76) shop or the drinking booth. There is enough material in the *Aṣṭādhyāyī* to show that not only did people enjoy themselves with indigenous intoxicating liquors of various kinds, but that they were using costly wines imported from distant places.

The following words denote the names of persons and places involved in the production and trade of liquor :

*Śuṇḍika*—Drinking-booth (IV.3.76).

*Śauṇḍika*—Vintner do.

*Āsuti*—Distillery (V.2.112).

*Āsutivāla*—Distiller do.

These are new classical words unknown in the old *Brāhmaṇa* and *Āraṇyaka* literature. Intoxicating liquor is called *madya* (III.1.100) and liquors in general *sura* (II.4.25). Of special interest is Pāṇini's mention of the *maireya* and *kāipśāyana* drinks discussed below.

*Maireya*. *Maireya* was a kind of favourite intoxicating drink. The word is unknown in the *Brāhmaṇa* and *Āraṇyaka* literature, which suggests its introduction in the post-Vedic period. The Buddha, however, found the use of *maireya* so common that in order to rescue people from its baneful effects he prescribed an injunction against it. We are indebted to Pāṇini for raising an important discussion about the accentuation of the word *maireya*, and this has incidentally preserved some valuable facts about the nature of this drink.

In the sixth book of the *Ashtādhyāyī* occurs the following sūtra : अंगानि मैरेये (VI. 2. 70) ' The first syllable of the word preceding *maireya*, gets the acute when it denotes the ingredient of the same.' It implies that the word *maireya* enters into a compound with words denoting its ingredients, and in such compounds the ingredient-denoting word is acute on the first syllable.

Leaving the particular grammatical point aside, we infer from the sūtra that Pāṇini had a knowledge of the ingredients (*aṅgāni*) of *maireya* liquor. It is not possible to understand the rule properly without having a knowledge of these constituents. Naturally therefore an enquiry into the mixing parts of this drink becomes our first objective.

The Arthaśāstra enumerates six varieties of liquor, viz., *medaka*, *praśannā*, *āsava*, *arishṭa*, *maireya* and *madhu* (Arthaśāstra Text, p. 120). Fortunately for us the full recipe of *maireya* is also given by Kauṭilya :

मेषशृंगीत्वक् क्वाथामिश्रितो गुडप्रतीवापः

पिप्पली-मरिच सम्भारस्त्रिफलायुक्तो वा मैरेयः ।

(Arth. Text. p. 120).

‘Prepare a decoction of *meṣaśṛṅgī* bark, mix it with jaggery and add the powder of long pepper (*pippalī*) and black pepper (*marica*); to it the powder of *triphalā* may be added optionally,—this is the recipe of *maireya*.’

In the above recipe *meṣaśṛṅgī*, *pippalī*, *marica* and *triphalā* belong to one group and *guḍa* to the other. Further light on this division is thrown by the two illustrations given on Pāṇini’s sūtra by the Kāśikā :

गुड मैरेयः । मधु मैरेयः ।

Both these examples refer only to the sweetening content of *maireya*, viz., *guḍa* and *madhu*, and obviously according to Pāṇini’s intention as implied in the sūtra, the word *angāni* refers only to the sweetening ingredients and not to the *auśadhi* contents used in the preparation of *maireya*, like *meṣaśṛṅgī* and others. It may be rightly inferred that the *auśadhi* contents of *maireya* must have remained somewhat constant, whereas the sweetening contents could be changed from *guḍa* to *madhu* or to *sarkarā*, etc. The naming of *maireya* would thus depend not on the constant ingredients, but on the sweetening parts subject to change (cf. Kāśikā. मद्यविशेषो मैरेयस्तस्य गुडविकारस्य गुडोऽङ्गं भवति मधुनो मधु ।) For example the customer ordering his *maireya* drink from the master of the booth would not say : Please give me *meṣaśṛṅgī-maireya* or *triphalāmaireya*, but would express his desire for a variety in taste by ordering at different times for *guḍamaireya*, *madhumaireya*, *śarkarāmaireya*, *phāṇitamaireya* and *iṅṣurasamaireya*, etc.

The above varieties of *madhuratarga* mixed with the

decoction of the bark of *meṣaśṛṅgī* and other specified herbs, must have produced a correspondingly low or high quality of drink. Caraka tells us that *maireya* was primarily a *madhura* wine, a drink sweet in taste. The choice of an inferior condiment like *guḍa* and *phāṇita*, or of a superior one like refined sugar made all the difference in the quality, taste and price of the *maireya* drink. The aristocratic customer in the tavern would order superior grade of wine, and in the case of *maireya* this emphasis would fall naturally on the first part of the compound, i.e., on the word denoting the sweetening constituent and hence the acute accent on it.

The Arthaśāstra mentions *guḍa* as a mixture of *maireya* in the recipe quoted above. It agrees with the example *guḍamaireya* of the *Kāśikā*. The other example *madhumaireya*, i.e., *maireya* prepared by mixing honey lacks confirmation from the above statement in the Arthaśāstra. The question arises as to whether we are on good authority in assuming that other sweetening ingredients besides *guḍa* were also added to *maireya*.

The answer to this is in the affirmative. In the chapter relating to the duties of the Superintendent of Royal Storehouse, Kauṭilya gives directions for the storage of liquids tasting astringent :

इक्षुरस-गुड-मधु-फणित-जाम्बव-पनसानामन्यतमो मेघशृङ्गी-पिप्पली क्वाथा-  
भिषुजो मासिकः षाण्मासिकः सांवत्सरिको वाचिभिटोर्वाहकेक्षुकांडाङ्गफला मलकावसुतः  
शुद्धो वा शुक्त्वर्गः ।

(Arth. Text, p. 94).

‘Mixture made by combining any one of the substances, such as the juice of sugar-cane, jaggery, honey, raw granulated sugar, the essence of the fruits of jambu and jack tree,—with the decoction of *meṣaśṛṅga* (a kind of plant) and of long pepper should be stocked. To this the following may also be added if desired viz., *cirbhita*, cucumber, sugar-cane, mango fruit and the

fruit of *myrobalam*. This mixture should be either one month or six months, or a year old.<sup>12</sup> This constitutes the *sukta-varga*.'

Although in this context Kauṭilya does not actually use the name *maireya* for the liquid recommended for stocking in the royal store-house, the recipe leaves no doubt that high class *maireya* was intended. The *auṣadhi* contents are the same, viz., the decoction of *meṣaśṛṅgī* and *pippalī* (*marica* is left out as of minor importance); in the optional group in place of *triphalā* alone, we have greater variety in *āmalaka*, *āmraphala*, *urvārūka* and *iṅṣu-kāṇḍa*. In the enumeration of the sweet contents in place of *guda* alone we have six varieties, of which *madhu* is also one. We can now understand the example *madhu-maireya* given in the Kāśikā on Pāṇini, VI. 2. 70, since honey like *guda* was also an *aṅga* or constituent from which the particular variety of *maireya* derived its name; we may also imagine that both *gudamaireya* and *madhu-maireya* were legitimate, and for the matter of that, ancient illustrations to Pāṇini's rule. The plural number of the Pāṇinian word *aṅgāni* also stands justified from its reference to as many as seven varieties of sweetening ingredients mixed with *maireya*, viz. molasses (*guda*) honey (*madhu*), sugar (*śarkarā*), sugar-cane juice (*iṅṣu-rasa*), thickened pastry (*phāṇita*) and sugar of jackfruit (*panasa*) and rose-apple (*Jāmbava*).

*Kāpiśāyana*. The name of the second important drink is *Kāpiśāyana* referred to in sūtra IV.2.99 :—

*Kāpiśyāb śhphak*.

*Kāpiśāyana* and *Kāpiśāyanī* derived in the sense of 'produced there' refer to the wine and grape exported

<sup>12</sup> I understand *māsika*, etc., not in the sense of 'to last for a month, or six months, or a year,' but as 'so much old' (i.e. not *bhāvi* but *bhāta*, cf. Pāṇini V. 1.80) since old wines were preferred.



from Kāpiśī. Kāpiśī<sup>13</sup> is even today the home of the grape. In ancient days an excellent quality of raisin wine was manufactured in Kāpiśī region and widely exported.<sup>14</sup> We are again indebted to Kauṭilya for supplying the clue to the name Kāpiśāyana : 'The juice of grapes is termed *madhu*. Its own native place is the commentary on such of its various forms as *Kāpiśāyana* and *Hārahūraka*.' (Arth. Trans. p.133). Obviously there were two varieties of the grape wine, the *Kāpiśāyana* produced in the region round Kāpiśī in north Afghanistan and the *Hārahūraka* in the south in the valley of the Harahvaiti<sup>15</sup> or Helmand. The black raisins are still called *harahūra*, and it is possible that the *Kāpiśāyana* or northern variety of wine was made from the green and *Hārahūraka* or Gāndhāra wine from the black grapes.

Kauṭilya's sentence, *tasya svadeśo vyākhyānam Kāpiśāyanam*, supplies the needed commentary on Pāṇini's *Kāpiśāyana* which must have been the name of the reputed wines from that region. That Kāpiśī was an emporium for this class of drinks is also proved by the recent archaeological discoveries at this place of numerous glass flasks, fishshaped wine jars and drinking cups which were used in the wine trade until many centuries after Pāṇini. (Cf. *Excavations at Begram* by Dr. Hackin).

*Kaṣāyas*. Pāṇini also refers to names of *Kaṣāyas*, or decoctions (VI.2.10, *Adhvaryu-kaṣāyayor Jātan*) of which

<sup>13</sup> Kāpiśī is ancient Begram on the confluence of the Ghorband and Panjshir rivers. An inscription in Kharoṣṭhī characters recently found there settles the ancient site of the place. (Dr. Sten Konow, Kharoṣṭhī Ins. on a Belgram Bas-relief Ep. Ind. XXII, pl.11).

<sup>14</sup> Cf. Bindusāra requisitioning raisin wine from Antiochos in the 3rd century B.C.

<sup>15</sup> *Harahvaiti* (Avestan), Harahuvati (O. Persian) San. Sarasvati, also called Haraquaiti (Cf. CH. I, p. 326). It is the modern Helmand (Vedic Index, II. 434, footnote to Sarasvati).

the *Kāśikā* gives several examples. The *dauvārika-kaṣāya*, must have been an intoxicating drink of mild effect specially prepared for the *duavārika* or the chamberlain officer, mentioned in Pāṇini (VII. 3.4) and also in Kauṭilya (Arth. Text. p. 247), whose duties imposed on him the restriction to indulge only in the mildest kinds of drinks.

Besides the above names, the Gaṇapāṭha of V.4.3 (supported both by *Kāśikā* and Candra) includes *kālikā* and *avadātikā* as names of special liquors. *Kālikā* must be the same as *kālika surā* in Kauṭilya (Arth. Text. p. 119) and *avadāikā* might be but another name for *sveta-surā* of the Arthaśāstra p. 121, which was also called *prasannā* (cf. *Kāśikā* on V. 4. 14). Kātyāyana refers to *śidhu* in a *vārttika* on II. 2.8.

*Distillation.* In the distillery (*āsuti*, V.2.112), ingredients were first prepared into a ferment (*kiṇva*); and when fermentation had advanced to the requisite stage, they were termed *āsavya* (III.1.126), literally 'that of which the distillation has become imminent' (*āvasyaka*). The sediment or refuse (*kalka*) left after distillation was termed *vinīya* (III.1.117), a technical word in the vintner's vocabulary, literally meaning that 'which is fit for removal.' According to Kauṭilya women and children could be employed for removing the *surā-kiṇva*, or fermented dregs (Arth. Text p. 121).

Another expression originating in the language of the drinking booth<sup>1</sup> was *kaṇe-hatya* (*pibati*) regularised in sūtra I.4.66, which corresponds to the English phrase 'drinking to the lees.'





# SANSKRIT LITERATURE DEALING WITH ART, ARCHITECTURE AND SCULPTURE, ETC.

BY

V. S. AGRAWALA

The history of Indian art is as old as the R̥gveda. Literary tradition connects the origin of the science of music (Gandharvaveda) to the Sāmaveda, of the military science (Dhanurveda) to the Yajurveda, of medicine to the R̥gveda and of architecture and sculpture as well as the mechanical arts to the Atharvaveda. Although literary treatises dealing with fine arts do not have such a high antiquity, the R̥gveda contains the germs of Indian architectonic activity. It refers to broad and wide strongholds, made of stone (*aśmamayī*) or of iron (*āyasī*), and forts with a hundred walls (*śatabhuji*) (R. V., I, 166, 8). We have also reference to domestic architecture in the form of dwelling houses, (*āgāra*, *duroṇa*, *śālā*, *harmya*, etc.) furnished with women's quarters (*patnīśadana*) raised on four or five pillars (*upamita*) with cross-beams (*parimit*) and supports (*prati-mita*).

The ancient remains at Mohenjodaro and Harappa give evidence of high technical progress made both in the sphere of brick constructions and town-planning. The cultural affinities of this "City Culture" are yet to be determined; at any rate literary texts to throw light on the technical side of that culture no longer exist.

On the Vedic side, however, a glimpse of the geometrical principles a knowledge of which must be presumed as the basis of the building activity is obtained from the Sulva Sūtras attached to the Śrauta Sūtras of Baudhāyana, Āpastamba, Mānava and Kātyāyana schools. These contain exact rules for the measurement (*Śulva*, measuring

string), and the building of the sacrifice and the fire altars.

The evidence from the epics is still fuller. From the description of capital cities in the Rāmāyaṇa such as Ayodhyā and Laṅkā we infer that town-planning had been greatly developed in terms of broad highways, and market places, residential and artisans' quarters in separate parts of the city. The Mahābhārata refers to the foundation and laying out (*nagara-māpana*) of the capital city of Indraprastha in the presence of Vyāsa and others which was an event of great public celebration. It also mentions the building of the Assembly Hall (*Sabhā*) of king Yudhisṭhira by the architect-engineer named Maya. In the description of this Hall which was supported on pillars and marked with a variety of sculptured representations of divine and human figures (*divya-mānusha abhiprāya*, *Sabhāparvan*), Maya refers to himself as the Viśvakarmā of the Dānavas, who had wrought for them pavilions (*prāsāda*), gardens, ponds, wondrous vestments, automatic chariots and extended cities with high ramparts and pleasing caves (*ramaṇīyāni bilāni*). The description of the Yādava capital of Dvārāvātī is even more full of technical details, referring to an elaborate system of defence works consisting of moles (*parikhā*), draw-bridge (*saṅkrama*), rampart (*prākāra*), gateways (*gopura*), defence-towers (*aṭṭālaka*), which were furnished with pulleys (*chakra*), levers (*huḍa*), earth-fitting locks (*yantra-khanaka*), and a variety of other intricate appliances. Even the exit and entry into the town were controlled by means of pass-ports (*Āraṇyakaparvan*, 16, 5-18).

The Jātakas refer to master architects (*Vatthuvij-jāchariyas-vāstuvīdyācharya*, *Jātaka* I, 297; (IV, 323) whose expert knowledge was availed of in the planning of cities (*nagara-sumāpana*, *Jātaka* VI, 448). Even Pāṇini (about 5th century B. C.) gives evidence of the knowledge of town planning; he says that the site marked for the encircling mole on the plan was known as *pārikheyī bhūmī*

(V, 1, 17) and the same rule was true in respect of the rampart and the palace (*prākārīyā* and *prāsādiya bhūmi*, *Kāśikā*).

A well-laid city may be pictured as equipped with a multitude of architectural buildings both for defence and practical needs of residence and business. Besides the mote, rampart and gateway of the fortification, the civil architecture possessed its quota of residential buildings, business quarters (*āpana*) intersected by streets (*saṁchāra*), royal store-houses (*Koṣṭhāgāra*, *bhāṇḍāgāra*), king's council-hall and other buildings as halls for drama, dance and music (*prekshāgriha*).

In the Jātakas music and dance were included amongst Śilpas and extensively cultivated. The Pāli literature is extremely rich in minute details about Vāstu and Śilpa, pointing to the existence of theoretical books bearing on the subject.<sup>1</sup>

The description of the construction of the great tunnel in the Mahāummagga Jātaka points realistically to architectural traditions both in actual practice and literature. 'The mouth of the tunnel was upon the Ganges bank and its entrance was in the city. It was provided with a door, eighteen hands high, fitted with machinery, so that one peg being pressed all were closed up. On either side the tunnel was built with bricks and worked with stucco (*sudhākamma*). It was roofed over with planks and smeared with cement (*ullokamattikā*), and whitened (*setakamma*). In all there were 80 great doors and 64 small doors, which all by the pressure of one peg closed, and by the pressure of one peg opened. On either side there were some hundreds of lamp-cells, also fitted with machinery, so that when one was opened all opened, and when one was shut all were shut. On either side there were 101 chambers for 101 warriors. In each was

<sup>1</sup> See Coomaraswamy, *Early Indian Architecture*, Cities and City-gates). It is said of Vaddhakis (the architect, builder, carpenter) that he worked according to Śilpa-plans (*sippānurupena*, Jātaka VI. 332), perhaps a reference to śilpaśāstra.

laid a bed of various colours, in each was a great couch shaded by a white sun-shade, each had a throne near the great couch, each had a statue of a woman, very beautiful—without touching them no one could tell they were not human. Also on either side of the tunnel, clever painters made all manner of paintings. The floor was strewn with sand white as a silver plate, and on the roofs were full-blown lotus-flowers. On both sides were booths of all sorts; here and there hung festoons of flowers and scented blooms. Thus they adorned the tunnel. (Fausböll, Jātaka text, VI, 432; Translation VI, 223).

The theory and practice of architecture are better juxtaposed from the Maurya period onwards. The *Arthasāstra* of Kauṭilya (4th century B.C.) discusses the royal fortress with elaborate technical details (II, 21, 22), and the monuments of Asoka's reign present to us real examples of sculpture and architecture in an amazing state of perfection. The *Nāṭyaśāstra* of Bharata deals with the theory and practice of several important fine arts, as music, dance and drama. It contains practical directions for building of theatres and explains with names the 108 dance-poses which speak of advanced specialization in the domain of fine arts. The importance of Bharata's work lies in its first systematic exposition of the theory of *Rasa* as the basis of Indian æsthetics or emotional experience. Both Poetry and Art in India accepted *Rasa* as the ultimate end and *sine qua non* of all finer expression and criticism. Subsequent rhetoricians developed it as the highest point of Indian poetics. The *Nāṭyaśāstra* is inherently based on much older material, but its present redaction seems to date from about the beginning of the Christian era.

The age of the Imperial Guptas witnessed the development of vigorous and flourishing schools of art, architecture and sculpture in the fourth and fifth century A.D. This is reflected in the form of numerous references to these arts in the works of Kālidasa (circa 4th-



5th century A.D.) and also in the growth of theoretical treatises dealing with fine arts. Classical Sanskrit poetry is rooted in the fine art discipline (*lalita kalāvidhi*) of its citizens, both men and women zealously participating in a type of culture whose very life-breath and soul were fine arts like dance, drama, music and painting. A knowledge of the sixty-four *Kalās* is reflected in the *Lalita-vistāra*. Varāhamihira (first half of sixth century) refers to the preceding works of Viśvakarmā, Garga and Manu and to the views of Vasishṭha and Nagnajita, whose names also occur amongst the eighteen celebrated Silpa-writers in the list of the Matsya Purāṇa (chs. 252—57) which underwent its final recasting about sixth century A.D. The same work refers to five orders of Indian pillars, as *Ruchaka* (square), *Vajra* (octagonal), *Dvivajra* (16-sided), *Pralīnaka* (32-sided) and *Vṛitta* (circular) [ib. 255, 2]. The *Mayamatam* ascribed to the sage Maya and dealing with houses, palaces, villages and towns is a valuable work on the science of Architecture but an early date for it cannot be postulated. On the other hand the *Mānasāra*,<sup>2</sup> a comprehensive work on Indian Architecture in 70 chapters dealing with palaces and pillars, towers and gateways, porticos and halls and a number of other detailed subjects of sculpture and iconography, may be assigned to the Gupta period (circa 5th century). The technique and theory of wall-paintings are dealt with in the *Chitrasūtra* (Part III of the *Vishṇudharmottara Purāṇa* which was already current in the 7th century, and therefore contemporary with the later phase of the art of Ajanta.<sup>3</sup> The *Chitrasūtra* touching on the method of preparing the plastered walls for painting and the conventions regarding the representation of gods, men, landscape and seasons, etc., seems to have been based on

<sup>2</sup> *Mānasāra*, Text and Translation by Dr. P. K. Acharya.

<sup>3</sup> The *Vishṇudharmottara*, Part III, *Chitrasūtra*, English Translation by Stella Kramrisch, Calcutta University. Dr. Coomaraswamy has translated ch. 41 of the *Vishṇudharmottara* dealing with Painting.

the living traditions of the age. The *Chittralakṣhaṇa* attributed to Nagnajita is preserved in its Tibetan version from which a German translation has been published by Laufer.

As a source book for early medieval art (8th—10th century) we have the *Samarāṅgaṇa Sūtradhāra* of king Bhoja (11th century), an encyclopædic work containing important chapters on architecture and painting (ch. 71, *Chittroddeśa*). It is followed by another important work, the *Mānasollāsa* also known as the *Abhilashitārtha-chintāmaṇi* (Wishing Stone of all Desirable Information) compiled by king Someśvara about 1125 A.D. Its 20 chapters out of 100 dealing with architecture, painting and images form an important source of knowledge of South Indian arts.<sup>5</sup>

The later Rajput period (10th—12th century) is marked by a colossal growth of architectural activity all over India. The Chandella temples at Khajuraho in Central India, the marble temples at Dilwara on Mount Abu in the west, the famous shrines at Bhuvaneshwara and Puri in the east and the religious buildings raised under Hoyaśāla patronage in the south were the works of architectonic giants who could plan and build on a large scale. A number of treatises especially the Āgama literature were compiled in this period, *e.g.*, the *Kāmi-kāgama* in which out of 75 chapters more than sixty deal with architecture and sculpture. The *Kāśhyapa Saṁhitā* also seems to date from this period. Subsidiary hand-books for the use of architects were also in demand and written, *e.g.*, *Vāstuśāstra* by Sukhānanda Yati (12th century), *Vāstusāra Prakaraṇa* of Thakkura Pheru

<sup>4</sup> *Samarāṅgaṇasūtradhāra* by Bhojadeva, Vol. I and II Gaekwad Oriental Series, Baroda.

<sup>5</sup> *Mānasollāsa*, Vol. I and II, Gaekwad Oriental Series. The Section on painting (*Alekhyakarma*) has been translated by Dr. Coomarswamy under the heading "The Technique and Theory of Indian Painting," Technical Studies, Vol. III, No. 2 Oct. 1934 Harvard Univ.

(written in 1315 A.D. in the reign of Allauddin Khilji) offering a clear commentary on the technical details of medieval Hindu temples, *Prāsādamāṇḍana*, *Vāstumāṇḍana*, *Rūpamāṇḍana* dealing with images) and *Vāstusāstra* by Sūtradhāra Maṇḍana, an architect at the court of Rāṇā Kumbha of Mewar (1419—69), *Manushyālaya chandrikā* by an unknown carpenter compiled to serve as a handbook for Kerala architects (15th century), and the *Śilparatna* by Śrī Kumāra (a big work in 81 chapters) written by a Kerala Brāhmaṇa at the close of the 16th century.<sup>6</sup> In remote parts of the country, especially in Orissa, Rajputana, Gujrat and South India, the literary and practical traditions have survived amongst the hereditary architects and artisans who still plan and build in pure Indian style and consult the old texts for guidance.<sup>7</sup> A critical study of the building traditions as preserved by them would be of great value in interpreting the old refractory Śilpa texts.<sup>8</sup> It is still more important that efforts should be made to understand and verify the Śilpa texts in terms of the surviving monuments of both architecture and sculpture from each period of Indian history.

<sup>6</sup> *Silparatna* in two parts—Trivandram Sanskrit Series. Dr. Coomarswamy has translated *Chittralakṣhaṇa* (Ch. 46 on painting) in the Ashutosha Memorial Volume, Patna, 1926—28, pp. 49—61.

<sup>7</sup> P. N. Bose, *Śilpa Śāstra*, Introduction, p. I.

<sup>8</sup> For a full bibliography of manuscript material, see Dr. P. K. Acharya's *Dictionary of Hindu Architecture*, App. I, pp. 749—804. Also *A summary of the Mānasāra: A Treatise on Architecture* by the same author; Ram Ray, *Essays on the Architecture of the Hindus*, 1834; Anathalwar and Rea, *Indian Architecture*, 3 Vols., Madras, 1921.



## PRESIDENTIAL ADDRESS : TECHNICAL SCIENCES

*By*

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GENTLEMEN,

To the authorities of the All-India Oriental Conference held at Hyderabad (Deccan) in December, 1941, I offer my best thanks for having done me a great honour by electing me President of the Technical Sciences Section of the Twelfth All-India Oriental Conference. It is with a mixed feeling of pleasure and apprehension that I have accepted the situation—pleasure at the idea of a possible meeting of other researchers in my own field of work as also those brilliant men who have won great renown by their researches in other branches of Oriental Learning—and apprehension at the idea of my own limitations both physical and intellectual. There are indeed many branches of Technical Sciences in Oriental Learning and a modern Varāhamihira alone with encyclopædic education could do full justice to the responsibilities of the situation which I have been elected to occupy. In these days even in Orientalia, encyclopædic research is possible, if at all, for but few gifted persons. I shall accordingly confine my address only to the special branches of Hindu Mathematics, Hindu Astronomy and a new science which I should like to call Ancient Indian chronology treated astronomically.

### HINDU MATHEMATICS

In Hindu Mathematics, the earliest researcher was Colebrooke whose work is now regarded as a classic in this subject. This work presented to the European scholars the whole content of Hindu Mathematics as contained in Bhāskara II's works, the *Līlāvati* and the *Bījaganita* and the mathematical chapters of the *Brāhma-Sphuṭa Siddhānta*. Dr. Kern brought out his edition of the *Āryabhaṭīya* in 1874. Rodet translated and published one section, the *Gaṇita* of this work into French under the name "*Calcul du Āryabhata*." Dr. Bühler published his work, *Indian Paleography* in the latter half of the last century. In this work he established from Subandhu's work dated about the sixth century A.D., the use of a symbol for a vacant notational place, viz., the cypher which was a dot in the poet's time.

as evidenced by the expression, *शून्यचिह्नद्वयः* or the *dots* to which the stars in the sky are compared. In the *Āryabhaṭīya* (499 A.D.), the notational places are found mentioned as स्थान which means none else than “place.” In this work are found the Indian rules for finding the square and cube roots of numbers, which show unmistakable use of notational places. The late Mr. Kaye, in his translation of the *Gaṇita* section of the *Āryabhaṭīya* used the word “Order” in place of Āryabhaṭa’s word “*sthāna*”, and he created quite a diversion by asserting that the Decimal System of Notation was not an invention of the Indian Mathematicians but had a foreign origin derived from the practice of writing from the right to the left which obtained there. This view of Kaye has been successfully combated by the researchers Dr. B. B. Dutt, Dr. A. N. Singh and late Prof. Sarada Kanta Ganguly.

From the field of Orientalia, the Decimal System of Notation is the greatest gift of the Hindu Mathematicians to humanity. After the conquest of Sind by Mohamad Ibn Kasim, it travelled to the old centre of Mohamadan culture at Baghdad and with the rise and spread of Mohamadan power over the world it spread over Europe. It has immensely simplified the art of calculation all over the world. In India this system was confined to the learned circles alone for some centuries even after the time of Āryabhaṭa I, till it found a place also in Indian Epigraphy. Dr. B. B. Dutt published his *Science of Sulva* in 1932, in which we find that the beginnings of many topics in the later Hindu Mathematics, had been made in the *Sulva* period, i.e., about 600 B.C. In the solution of Indeterminate Equations of the first and second degrees, the achievements of the Hindu mathematicians is also very remarkable. The method employed in solving Indeterminate Equations of the first degree is called “*Kuṭṭaka*” or pulveriser. This method in the complete form is found in the *Āryabhaṭīya* (499 A.D.), while in Bhāskara II (1150 A.D.) we have a full treatment of all classes of Indeterminate Equations of the first degree. The lemma of Brahmagupta (628 A.D.), called by him *Vajrabhadha* was rediscovered by Euler (1707-1783) and this method is used by Brahmagupta in solving Indeterminate Equations of the second degree, also by the later Hindu Mathematicians in solving comparatively easier problems. The Indian method of चक्रबाल or the “cyclic method” for the general solution of all Indeterminate Equations of the second degree follows as a corollary<sup>1</sup>

<sup>1</sup> P. C. Sengupta “Origin of the Indian Cyclic Method for the solution of  $Nx^2+1=y^2$ ” in the *Bulletin of the Calcutta Mathematical Society*, 1918.

to the lemma of Brahmagupta. To whom the credit of its invention which is purely Indian, is to be ascribed has yet remained a riddle to many. The rules are found in Bhāskara II's work the *Bījaganita*, but the author lays no claim to originality, when he says चक्रवालमिदं जगुः "this has been sung (by others) as the cyclic rule." Thus far it can be said that the rules have not yet been found in any hitherto known previous authors. I hope that further researches may show that this achievement is to be ascribed to Padmanābha, if his work be ever brought to light. It is now a matter for research if it was also the Hindus who first used a symbolical notation in Algebra.

In Trigonometry, the Hindu mathematicians and astronomers used generally the functions of "sine", "cosine" and "versed sine" in analysis. The tabular differences of 24 "sines" in a quadrant are first found given in the *Āryabhaṭīya* (499 A.D.) calculated by the most elementary methods. The most accurate Hindu Value of  $\pi$  is also found in the same work as given

$$= \frac{101 \times 8 + 62000}{20000} = 3.1416. \text{ The Hindus by their methods, though}$$

very elementary, could solve both plane and spherical triangles,<sup>1</sup> right angled and of other classes. Further in Hindu Mathematics we find the beginnings made of the Infinitesimal calculus. The researchers in this field have been Bāpudeva in *J.A.S.B.* 1858 and Sir B. N. Seal in his "*Positive Sciences of the Hindus.*" I have also contributed a paper in the *Calcutta University Journal of Letters*, vol. XXII, 1931, styled "Infinitesimal Calculus in Indian Mathematics and Astronomy." The idea of Differentiation developed from an attempt of the Hindu astronomers to find the instantaneous daily motion of planets, and the idea of Integration, to find the surface and volume of a sphere, etc. So far as we can see, in Differentiation the idea of limits was recognised by all authors from Brahmagupta (628 A.D.) to Bhāskara II (1150 A.D.). The idea of the real Differential Calculus thus seems to have originated in India. We have in Bhāskara II an equation which is equivalent to—

$$d(\sin \theta) = \cos \theta d\theta$$

While engaged in translating Brahmagupta's *Khaṇḍakhadyaka*, the *Alarkand* or *Khaṇḍakāṭaka* of the Arab astronomers, I came across a passage which properly interpreted, makes it clear that Brahmagupta recommends the use of the Second Difference in Interpolation. On this topic a paper was published by me in the *Bulletin of the Calcutta Mathe-*

<sup>1</sup> P. C. Sengupta, "Greek and Hindu Methods in Spherical Astronomy" in the *Calcutta University Journal of Letters*, vol. XXI, 1931.

*matical Society*, vol. XXIII, 3, 1931. It will be clear from my paper under reference that of the Calculus of Finite Differences also, the first step was taken by the Hindu Mathematicians.

Drs. Dutt and Singh have undertaken to publish a complete anthology of Hindu Mathematics, of which up to now the first two volumes have been published, and the third volume will be published, I trust, when the times are more favourable. These volumes, it is expected, will give the reader a complete history of Hindu Mathematics and all researches thereon up-to-date. If such a private venture is to prove successful, liberal help from the public or a university is perhaps essential. From the very nature of such publications, the venture cannot be remunerative.

In this connection we should not forget to mention the name of Prof. Rangacharya, M.A. of Madras, the translator and publisher of the *Ganita-Sāra-Saṃgraha* of Mahāvīra. The work has thrown much light on Jaina Mathematics and has been of much help in the study of the history of Hindu Mathematics. The researches of Prof. A. A. Krishnaswami Ayyangar, M.A., of the Maharaja's College, Mysore, also deserve mention. I now pass on to the progress made in the study of the history of

#### HINDU ASTRONOMY.

In this branch of Orientalia, the earliest writers were Bailly in his *Astronomie Indienne* and Delambre in his classical work *Astronomie Ancienne*. Next in point of time was probably Bentley whose work, "A Historical view of Hindu Astronomy", is well known. Then came the edition of the *Sūrya Siddhānta* by Bāpudeva and Wilkinson. Warren's *Kāla Saṃkalita* was perhaps next to appear in this field of research. In 1860 was published Burgess' Translation of the *Sūrya Siddhānta*, in the *JAQS*. A more important work from the view point of the history of Hindu astronomy next appeared in the publication by Thibaut and Dvivedi of Varāha's *Panca-Siddhāntikā*, which threw much more light on the history of the *Siddhāntic* or scientific Hindu astronomy. About the end of the last century appeared the *Ganaka Taramiṇī* (1892) of Dvivedi in Sanskrit, Dīkṣita's *Bhāratiya Jyotiḥ-śāstra* (1896) in Marāṭhī and *Amāder Jyotiṣa o Jyotiṣī* in Bengali by Prof. J. C. Ray, M.A., late of the Cuttack College, being mainly based on the works of Dvivedi and Dīkṣita. These works should all have been written either in Sanskrit or English and not in any of the provincial vernaculars.



In the year 1918, Ancient Indian History and Culture was accepted as a subject for the M.A. degree of the Calcutta University at the instance of the late Sir Ashutosh Mookerjee, and Indian Astronomy and Mathematics was formed into a group for special study for this final degree of the University. From this date both teaching and research were provided for in the Calcutta University. In 1925 appeared an edition by Pandit Babuaji Miśra of the *Khaṇḍakhādya* of Brahmagupta with Āmarāja's Commentary. This publication led me to get at the clear position of Āryabhaṭa I as the real maker of the Indian scientific astronomy in a publication of mine, "Āryabhaṭa the Father of Indian Epicyclic Astronomy", published in the Calcutta University *Journal of Letters*, vol. XVIII, 1928. The other publications by me have been the papers :—

(a) A Translation of the *Āryabhāṭīya* in the Calcutta Univ. *Journal of Letters*, vol. XVI, 1927 ; (b) *Āryabhaṭa's* method of determining the mean motions of planets, in the *Bulletin of the Calcutta Mathematical Society*, vol. XII, 3 ; (c) Time by Altitude in Hindu Astronomy and (d) Hindu Luni-solar Astronomy, also in the *Bulletin of the Calcutta Mathematical Society* in vols. XVIII & XXIV respectively. The Introduction to the Calcutta University reprint of Burgess' Translation of the *Sūrya Siddhānta*, published in 1935, has been my last published contribution to the History of Hindu Astronomy.

As to the Hindu *Siddhāntic* astronomy, foreign influence is unquestionable as may be seen from the brief and meagre account of Greek Luni-solar Astronomy under the name *Romika Siddhānta*, given in the *Panca-Siddhāntikā* of Varāhamihira. The *Vaśiṣṭha* and the *Paṇḍita Siddhāntas*, of which a summary is given in the same work of Varāhamihira, also point to a foreign origin which may be Greek or Babylonian. Even the modern *Sūrya Siddhānta* has in it the unmistakable influence of Babylonian astronomy in its conception of the gods of *Manda*, *Sighra* and *Pāta*, as producers of planetary inequalities. Further, the tradition that it bears is, that it was of *Āsura* or Babylonian origin.

In spite of all these foreign influences *Āryabhaṭa* I (499. A.D.) the real maker of the Indian Scientific Astronomy shows great originality in a thorough revision of all the astronomical constants as they came from the foreign sources. These have been set forth in my paper "Hindu Luni-solar Astronomy" and in my Introduction to the Calcutta Univ. reprint of Burgess' Translation of the *Sūrya Siddhānta*. The chief improvements made by Āryabhaṭa are given in the following tabular form ; -

Astronomical constants	Aryabhata 499 A.D.	Ptolemy 150 A.D.	Moderns 500 A.D.	Aryabhata's Error	Difference from Ptolemy
Longitude of Sun's Apogee	78°	65°30'	77°19'	+0°41'	+ 12°30'
Sun's maximum Equation of Apsis	2°9	2°30	1°59	+0°10'	— 0°18
Sid. per. of Moon's Node	6794.7495 da.	6796.4558 da.	6793.3911 da.	1.3584 da.	— 1.7063 da.
Long. of the Aphelia of					
(a) Saturn	236°	224°10	243°40	— 7°40'	+ 11°50
(b) Jupiter	180°	152°9	170°22	+ 9°38'	+ 27°51
(c) Mars	118°	106°40	128°28	—10°28'	+ 11°20
Long. of Nodes of					
(a) Saturn	100°	90°	100°32	— 0°32'	+ 10°
(b) Jupiter	80°	70°	85°13	— 5°13'	+ 10°
(c) Mars	40°	30°	37°49	+ 2°21'	+ 10°
(d) Venus	60°	55°	63°16	— 3°16'	+ 50°
(e) Mercury	20°	10°	30°35	—10°35'	+ 10°
Max. Equation of Apsis					
(a) Saturn	7°53	6°30	6°57	+ 1°4'	+ 1°23
(b) Jupiter	5°24	5°14	5°16	+ 0°8'	+ 0°10
(c) Mars	11°28	11°19	10°33	+ 0°55'	+ 0°9

Here the differences between the constants of Āryabhaṭa I and Ptolemy cannot be explained by the precession rate of Ptolemy of 1° per 100 years in the cases of the longitudes of aphelia and nodes of planets, while in the remaining cases independent determination by Āryabhaṭa I must be conceded. These facts ought to be enough proof of the claim for Āryabhaṭa I being held as the greatest of all the ancient Indian astronomers, as the real maker of the Indian *Siddhāntic* Astronomy, and not a mere borrower from any foreign system of astronomy.

Again the teaching in Hindu Astronomy that at starting point of the *Kali*-reckoning, the "mean planets" were at the very beginning of the Hindu sphere and that the longitudes of the moon's apogee and node were respectively 90° and 180° of the same sphere, is also to be ascribed to Āryabhaṭa I. The epoch of *Kali*-reckoning, viz., Feb. 17-18, 3102 B.C., Ujjayini Mean Time, 0 hr. or 6 A.M. of Feb. 18, was most likely arrived at by him by an Indeterminate Analysis. Although at this epoch the "mean planets" did not exactly coincide with the

1st point of the Hindu sphere (the mean vernal equinox of 21st March, 499 A.D.) and the lunar apogee and the node did not have the longitudes  $90^\circ$  and  $180^\circ$  of it, there was something approaching a general agreement with the hypothesis with which Āryabhata I had started. This is borne out by the researches of Bailly, Bentley, Burgess and also by those of myself. It is thus seen that the *Kali*-reckoning was an astronomical fiction invented by Āryabhata I to simplify his rules for stating his astronomical constants at this epoch. *It is also clear from the facts stated above that this epoch of 3102 B.C. cannot have any chronological significance.*

But as we come down by 3600 years from this Kali epoch to Āryabhata's time using his constants, to the date, March 21, 499 A.D. Ujjayinī Mēan Midday, (J.D. = 1903997), we have :—

	Aryabhata's Mean Trop.		Error in Aryabhata's		Moderns		Error in	
Planet	Mean Long.	Longitudes	Aryabhata's	True	True	Aryabhata's	True	Aryabhata's
	Audayika	Moderns	Mean longs.	Longitude	Longitudes	True	Places	
Sun	0°0' 0	359°42 5	+17'55"—	2°6' 6"	1°37' 48"	+0°28' 18"		
Moon	280°48 0	280°24 52	+23' 8"—	— — —	— — —	— — —	— — —	— — —
Moon's								
Apogee	35°42 0	35°24 38	+17'22"—	—	— — —	—	—	—
Moon's								
Node	352°12 0	352° 2 26	9'34"—					
Mercury	186° 0 0*	183° 9 51	+2°50' 9"	352° 4'	349° 4'	+3°0' 1		
Venus	356°24 0	356° 7 51	+ 0°16' 9"	359°43'	359°18'	+0°25'		
Mars	7°12 0	6°52 45	+0°19' 15"	10°50'	10°23'	+0°27'		
Jupiter	187°12 0	187°10 47	+0° 1' 13"	185°57'	186°40'	-0°47'		
Saturn	49°12 0	48°21 13	+0°50' 47"	40° 5'	40°56'	-0°51'		

The above figures show to some extent how far Āryabhata I was accurate as an observer.

Again Āryabhata's year = 365da. 6hrs. 12min. 30secs.

and True Sid. year = 365da. 5hrs. 9min. 10secs.

His year was thus in error by about + 3min. 20secs. But the *Paulīśa Siddhānta* year =  $\frac{43831}{120}$  days = 365da., 6hrs. 12min., which was more accurate but still Āryabhata I perhaps did not find it to have been so. He did not accept any astronomical element transmitted from a foreign source as correct until and unless it was verified by his own observation or observation records accessible to him.

<sup>1</sup> Maximum error in Āryabhata.

As to the discovery of lunar inequalities, Āryabhaṭa I (499 A.D.), Brahmagupta (628 A.D.) and Lalla (748 A.D.), recognised only one. But on coming down to the time of Muñjāla (932 A.D.) we find that this astronomer first discovered the second inequality of the Moon<sup>1</sup> and Bhāskara II (1150 A.D.) the third inequality. The Hindu form of the "evection" equation is much better than that of Ptolemy and stands on par with that of Copernicus (1473-1543).

The other details of Hindu astronomy chiefly concerned with the Hindu astronomical methods of calculation, were improved upon and corrected by Brahmagupta and Bhāskara II. Periodical corrections to planetary positions as derived from the *Siddhāntas*, have been made by Lalla, Śrīpati, Bhāskara II, Gaṇeśa Satānanda and Makaranda and in Bengal by Raghavānanda. They have also derived simpler methods of calculation according to the *Siddhāntas*. The outstanding fact from all researches up to date is that the first Hindu scientific *Siddhānta* *The Āryabhaṭīya*, was started from the year 499 A.D. and by Āryabhaṭa I.

From the view point of the history of Hindu astronomy, there is a great gap from about 1400 B.C. to 499 A.D., which remains yet to be explored—I mean the period of transition from the astronomy of the *Velūṅgas* to the age of the *Siddhāntas*. In this period lived the astronomers Garga, Kaśyapa, and others whose names and extracts from whose works are quoted by Bhaṭṭotpala (966 A.D.) in his commentary on the *Brhat Samhitā* of Varāhamihira. There are works like the *Vṛddha Garga Samhitā* still extant, which should be rescued from the total oblivion into which they are fast sinking. These astronomers described *cāras* or courses of planets of which we get some idea from the *Panca-Siddhāntikā*, chapter XVII and also from the *Arthaśāstra* of Kautilya. It is a very important point for research how far these *cāras* described in these earlier works, could have influenced the first formation of the scientific Hindu Astronomy by Āryabhaṭa I. I now pass on to another branch of study which has been lately encouraged by the Calcutta University—I mean the subject of

#### ANCIENT INDIAN CHRONOLOGY

This is a science the development of which would be most helpful in a clear understanding of all the branches of Oriental

<sup>1</sup> On this topic two papers have been published in the *Bulletin of the Calcutta Mathematical Society*, one in vol. XXII, 2 and 3 by Mr. Dharendra Nath Mukhopadhyaya, and the other in vol. XXIV, 1, by me named "Hindu Luni-Solar Astronomy".

Learning. It would attempt at providing land-marks of dates in the unwritten Ancient Indian History which is yet to be explored and should be illuminated by astronomy and other sciences. The sequence of the works in the whole of Sanskrit and Sanskritic literature can only be ascertained by an intensive research carried on by the methods of chronology which have emerged from the basis of Astronomy specially. Those of us who possess some knowledge of Astronomy necessary for research in this line, would naturally base their findings on this science, which is the oldest as developed by man and is the most perfect of all the sciences. The astronomical constants ascertained up to date, are almost final, and may be taken as correct for all times past, present or future.

In spite of the high degree of perfection that this science of Astronomy has attained now, the handicaps are many to a researcher using the methods of this science. There may be (a) want of astronomical data, (b) injudicious selection of data and (c) no absolute fixing of the date even in the case of a most careful selection of data—the accurate date only possible when the anchorage of a correct tradition is reached, and finally (d) in some cases we may get, in our research, statements or time-references in a work which are more or less traditional and not quite true for the time deduced, when the work came into existence. In the midst of all these handicaps we may have another anchorage in a peculiar solar (or lunar) eclipse mentioned in a work which is being chronologically surveyed.

The pioneers in this study of astronomical chronology as applicable to Vedic literature, were our illustrious countryman the late Mr. B. G. Tilak and late Prof. H. Jacobi of Germany. Their works and the results arrived at by them are known to all. The followers of Linguistic methods of study disbelieved their findings. The study received a set back, but it is time that this should be revived.

It was in 1929, that I first published in the Calcutta Univ. *Journal of Letters*, vol. XIX, a paper named "Date of Composition of the Modern *Rāmāyana*" in which it was shown that the present recension must be dated about the middle of the 5th Century A.D. I then published another paper on the "Date of Kalidāsa" in the Bengali Journal, the *Sāhitya Parishat Patrikā* in the Bengali year 1341 or 1934 A.D., in which my finding came out that the great Sanskrit poet flourished about the middle of the 6th century A.D.; this has been corroborated by my further researches. I next took up about the year 1932, the problem of finding the year of the

*Bhārata* Battle and in the year 1936 could arrive at the result that it was fought in 2449 B.C. My research was published in 1938, in a paper named "Some Astronomical References from the *Mahābhārata* and their Significance" in the *JRAS*, Bengal, Letters, vol. III, 1937. In 1939 were published in the same journal, vol. IV, 1938, by me the four following papers:

- (1) *B'ārata* Battle Traditions,
- (2) Solstice Days in *Vedic* Literature,
- (8) *Madhu Vidyā* or Science of Spring,
- (4) When Indra Became *Maghavan*.

These papers were noticed in "*Nature*" in its issue of Jan. 6, 1940. In the first of these four papers I established that, of the three traditions as to the Date of the *Bhārata* Battle, viz., (i) *Āryabhaṭa* tradition that it was fought in 3102 B.C., (ii) the *Vṛddhagarga* tradition that it was fought in --2526 of the *Śaka* era or 2449 B.C., and (iii) the *Purāṇic* tradition that the interval between the birth of *Parikṣit* and the accession of *Mahāpadma Nanda*, was either 1015, 1115, 1050 or even 1500 years, both the traditions (i) & (iii) are incorrect and (ii) alone appears to be correct being corroborated by the *Mahābhārata* incidental references. The *Kali-yuga* of which the *Mahābhārata* speaks, was started truly from Jan. 10, 2454 B.C.—the *Māgha*-full-moon day which was the winter solstice day of the year. In the next paper I showed that the *Vedic* Hindus knew of a method for accurately finding the solstice day of either description, and from the statements of days of the winter solstice in the *Taittirīya Samhitā* (first quoted by *Tilak* in his *Orion*), I could arrive at the dates 3517 B.C., 2934 B.C. and 2378 B.C. Some other dates which I could find from other statements in the *Brāhmaṇas* and *Srauta Sūtras*, I have had to give up when I took them up for closer scrutiny later on: these I shall detail presently. From the third of these papers, I could arrive at the *Vedic* antiquity of 4000 B.C., and from the fourth I got the same antiquity at 4170 B.C. These two dates are practically the same.

I was much encouraged in my researches by Professor Dr. M. N. Saha, D.Sc., F.R.S., and I applied to the Calcutta University for assistance in research work in ancient Indian chronology, out of the Trust Fund created by the late Maharaja Sir Manindra Chandra Nandi of Cossimbazar, for researches in Indian Astronomy and Mathematics. Our university chiefly through the influence of Dr. Syamaprasad Mookerjee, M.A., B.L., D.Litt., M.L.A., Bar-at-Law, President of the Councils of Post Graduate Teaching in Arts and Sciences, granted me

the facilities for research prayed for in my application. I had already retired from Govt. service in Jan. 1934, and could thus pay undivided attention to research work in this field. I published three papers more in the *Journal of the Royal Asiatic Society of Bengal*, Letters, and one paper in "*Indian Culture*", viz. :

- (1) "The Solar Eclipse in the *Rgveda* and the Date of Atri,"—*JRASBL*, VII, 1941
- (2) "Time Indications in the *Baudhāyana Śrauta Sūtra*", *JRASBL*, VII, 1941.
- (3) "Gupta Era" *JRASBL*, Vol. VIII, 1942
- (4) "Kaniṣka's Era" in '*Indian Culture*', 1941.

The first of these papers was reviewed in "*Sky and Telescope*" vol. I, 5, March, 1942: Harvard College Observatory, Cambridge, Mass., under the caption "Eclipse of July 26, 3928 B.C." In this paper I showed that the eclipse spoken of in the *Rgveda*, which was seen by Atri, happened on a summer solstice day (in the period from 4000 B.C. to 2400 B.C.) and was finished in the fourth part of the day—observed from near a cave either in the Himalayas or the Karakoram range. The solar eclipse of July 26, 3928 B.C. was the unique solution of the problem. This gave me the third confirmation of the Vedic antiquity of about 4000 B.C. In the next paper, I examined the days for starting the *Rajasūya*, *Nakṣatrestī* and the *Pancāśārādīya* sacrifices as given in the *Baudhāyana Śrauta Sūtra*. Here the mean date came out as about the year 887-86 B.C. In the third paper on "Gupta Era", I verified from a set of eleven inscriptions using this era, that the Zero-year of this era was 319 A.D., and in times later than that of Āryabhaṭa I. in some of the above eleven inscriptions we have to take the zero year as 319-20 A.D. showing a change of the year beginning from the *Pauṣa Śuklādi* reckoning to that of the *Caitra Śuklādi* reckoning of Āryabhaṭa I. In the paper on "Kaniṣka's Era" my finding is that the regnal years of the king started most likely from 80 A.D., and that his real accession took place in 78 A.D., when king Kadaphisas II died.

By the middle of the year 1941, a complete work on Ancient Indian Chronology embodying my researches done at the instance of our university and all of my previous researches was submitted for publication, but owing to the war conditions which have produced a great shortage of paper, its publication is being delayed. I had no other alternative left to me but to announce the results only, of my researches on Vedic Antiquity and *Brāhmaṇa* Chronology in the Bengali research journal

"*Srībhārati*", as this came very handy. It would have been of course, far better, if I did this in the journal of the Royal Asiatic Society of Bengal.

The sum total of my findings as to the Vedic antiquity may be thus briefly stated. The superior limit which I got in my published papers, viz., of 4000 B.C., has received further confirmation from (1) my ascertaining the date about which Yama's two dogs, *Canis majoris* and *Canis minoris*, had equality in right ascension as interpreted and inferred from the Vedic references, (2) Our traditional day of Indra's victory over the *Asuras* or clouds, on which it was usual to hoist Indra's flag (*Indradhvaja*), the mean date for the festival being the 15th September, 1929 of our time, which was the summer solstice day at this superior age limit of the Vedic antiquity, and (3) the statement in the *Atharva Veda*, that the winter solstitial colure passed through *Aja Ekapūt* or  $\alpha$  *Pegasi*, all of which were true for 4000 B.C. In the *Atharva Veda* and the *Rgveda* I found other three references which respectively led to the dates of (a) 3385 B.C. from the phenomenon of the heliacal rising of  $\lambda$  and  $\nu$  *Scorpionis* (*Vicrtau nāma tarake*) spoken of in the *Atharva Veda* and (b) 3250 B.C. from the legend of *Prajāpati* and *Rohiṇī* in the *Rgveda* and the *Aitareya Brāhmaṇa*, while (c) the rising from the annual sleep of the *Rbhus*, twelve days after the beginning of the rains, on the first heliacal visibility of the star *Canis majoris* led me to the date 2760 B.C. The inferior limit to the Vedic antiquity I have accepted as the time of the *Pāṇḍavas*, is 2449 B.C., which is traditional, and is also supported by the *Rgvedic* references of a non-astronomical nature.

In the chronology of the *Brāhmaṇas* if it be permissible to include the *Taittirīya Samhitā*, its date according to my finding is as stated already is a little later than that of the *Pāṇḍavas*, viz., about 2378 B.C. All the *Brāhmaṇas* and the *Srauta Sūtras* do not give us time indications. The *Tāṇḍya* and the *Jaiminīya Brāhmaṇas*, have a time reference true for about 1600 B.C. The *Kauṣītaki Brāhmaṇa* is to be dated about 1000 B.C. The *Taittirīya* and the *Satapatha Brāhmaṇas*, the *Kātyāyana* and the *Āpastamba Srauta Sūtras*, all say that spring begins with the *Phalguni* full-moon day. From such a statement the superior limit to the date when this was true is about 600 B.C. In the case of these two *Brāhmaṇas* the superior limit may be raised to about 900 B.C. but it is doubtful if this can be maintained. Finally the *Brāhmaṇas* which teach that the two "wings" of the year are equal and that 31 lunations = 2½ years must be dated between 1500 to 1000 B.C.; about



1000 B.C. the sun's passage from the winter solstice to the summer solstice, took 185 days.  $\{866 \times 2\frac{1}{2} \text{ da.} = (865 \times 2 + 185) \text{ da.}\} = 915 \text{ days}\}.$

In this field of ancient Indian chronology has appeared another book very lately by Dr. K. L. Daftari, D.Litt., of Nagpur of which the method and contents will, I hope, be discussed at this session of the All India Oriental Conference. Though published in 1942, the author seems to have been unaware of my publications in the *JRASB* Letters, before that date and bearing on the same topics.

As researchers we are all truth-seekers (*Satyadharma*) and I conclude with *Upanisadic* prayer :

हिरण्यमेन पात्रेण सत्यस्यापिहितं मुखम् । .

तत्त्वं पुषन्नपावृणु सत्यधर्माय दृष्टये ॥

“The face of Truth is hidden by a golden plate, O Pusan, do thou remove that for the vision of us who are worshippers of Truth.”

# THE DATE OF THE BHARATA WAR

BY

M A

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(Reprinted from the Journal of the Ganganatha Jha  
Research Institute, November, 1950).



# THE DATE OF THE BHĀRATA WAR

(FROM ASTRONOMICAL DATA ONLY)

BY TARAKESWAR BHATTACHARYYA

## INTRODUCTION

To students of ancient Indian history and particularly to those, who are keen about the exact date of the Bhārata war the great epic, the *Mahābhārata* is a vast storehouse of valuable information.

The search, for the date of the Bhārata war, presupposes the belief, that the war in question did really take place, and that the persons, who are said to have taken part in it, were really historical personages. So the statements, made by them regarding times and events, as recorded in the *Mahābhārata*, must be relied upon, for the purpose of historical investigation, with, of course, due caution and judgment.

There are many direct and straightforward statements in the *Mahābhārata*, without any scope for ambiguity. These may help us immensely in solving many of the problems.

We do not know exactly what system of Astronomy was followed in the time of the Bhārata war for preparing the calendar of dates, nakṣatras and tithis. But we may take it to be of fairly an advanced type, and capable of being verified (as will be seen later) and of standing the test of rigorous calculations by the modern improved Astronomy.

*Review of Contemporary Workers*

The latest researches on the date of the Bhārata war were done by Professor P. C. Sen Gupta, M. A. of the Calcutta University, Mr. Karandikar, Editor, *Keshari*, Poona and Dr. K. L. Daftari of the Nagpur University.<sup>1</sup> All of them based their dates on extraneous traditional sources, without even questioning the reliability of the same. None of them tried to get at their respective dates from the internal evidences, in the *Mahābhārata*. They used these evidences only as confirmatory to their preconceived dates.

Professor Sen Gupta accepted the date given by Varāhamihira in his *Brhat-Samhitā*. Varāha cited Vṛddha Garga as his authority. His statement runs as follows :

आसन् मघासु मुनयः शासति पृथ्वीं युधिष्ठिरे नृपतौ ।

षड्द्विक-पञ्च-द्वियुत-शककालस्तस्य राज्ञश्च ॥<sup>2</sup>

(*Translation* : The seven Ṛṣis (Ursa Major) were in the nakṣatra Maghā during the reign of King Yudhiṣṭhira. The year of this king (Yudhiṣṭhira) is equal to Śaka year plus 2,526.)

The Śaka year 0 (zero)=78 A. D. The 0 (zero) of Yudhiṣṭhira's era=78 - 2526 = - 2448 A. D.=2449 B. C. Professor Sen Gupta accepted this year (2449 B. C.) as the beginning of Yudhiṣṭhira's era and the date of the Bhārata war. Neither Varāha nor Vṛddha Garga supplied any argument in favour of this statement. Professor Sen Gupta had also no argument in its favour. From the mention of Śaka era in the statement, it appears that the time of Vṛddha Garga comes after 78 A. D.; hence, his dogmatic statement on the Bhārata war cannot be accepted as true, unless it is supported by other more reliable evidence.

<sup>1</sup> We may add the name of Professor V. B. Athavale of the H. P. T. College, Nasik who wrote some articles which were published in the Ganganatha Jha Research Institute's *Journal* Vol. IV. —Editor

<sup>2</sup> *Brhat-Samhitā*, Saptarṣi cara 3.

Mr. Karandikar did not rely on the *Mahābhārata* for his date which is 1931 B. C. He derived it from the list of geneologies, given in the *Vāyupurāṇa*. He gives his calculation as given below:

Bārhadhratha Kings (Period of)	..	1,006	years
Pradyota               "               "	..	138	"
Śaiśunāga           "               "	..	365	"
Nandas               "               "	..	100	"
Accession of Candra Gupta	..	322	B. C.

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Total= 1931 B.C.

The date of Dr. K. L. Daftari is 1,197 B. C. He also did not follow the *Mahābhārata* in getting his date, but derived the same from the list of Paurāṇic geneologies. His calculation is as follows :

Bārhadhratha Kings (Period of)	..	536	years
Pradyota               "               "	..	69	"
Śaiśunāga           "               "	..	180	"
Nandas               "               "	..	100	"
Accession of Candra Gupta	..	312	B. C.

Total=1,197 B. C.

It may be noted that Dr. Daftari made the total period of Bārhadhratha, Pradyota and Śaiśunāga kings nearly half of what is given in the Purāṇas. His argument for this is that the word Varṣa (year) formerly meant a half year.<sup>3</sup>

But in our opinion there are enough materials in the *Mahābhārata* itself which if relied on and properly worked out, might yield us a satisfactory date for the Bhārata war, quite independent of all external evidences.

There are two very significant references in the *Mahābhārata* capable of giving us a clue for the date of the Bhārata war. They are :

<sup>3</sup> *Astronomical Method, Chronology of Ancient India* by Dr. K. L. Daftari, I. P. 94.

- (1) Bhīṣma's statement regarding the date of his expiry, and
- (2) Kṛṣṇa's statement regarding the date of the beginning of the war.

They are given below with translations :

(1) *Bhīṣma's statement—*

परिवृतो हि भगवान् सहस्रांशुदिवाकरः ।  
 अष्टपञ्चाशतं रात्र्यः शयानस्य (च ?) मे गताः ॥  
 शरेषु निशिताग्रेषु यथा वर्षशतं तथा ।  
 मावोयं समनुप्राप्तो मासः सौम्यो युधिष्ठिर ॥  
 त्रिभागशेषपक्षोयं शुक्लो भवितुमर्हति ॥<sup>4</sup>

*Translation—*The thousand-rayed sun has certainly turned back (i. e. the sun has crossed the southern solstice and begun his northerly course). I have passed 58 days on the bed of sharp arrows. This time has been, as it were, 100 years. O! Yudhiṣṭhira, the month of Solar Māgha has just set in, and the three-fourths of the lunar month is gone ; this is Śukla Pakṣa, or the bright half of the lunar month (i. e. the tithi on this day is Śukla eighth).

(2) *Kṛṣṇa's statement to Karna—*

सप्तमाच्चापि दिवसादमावास्या भविष्यति ।  
 संग्रामे युज्यतां तस्यां तामाहुः शक्रदेवताम्<sup>5</sup> ॥

*Translation—*After seven days from today there will be amāvāsyā (new moon day) in the nakṣatra of Jyeṣṭhā. So begin the war on that day.

Bhīṣma made his statement to Yudhiṣṭhira just before his death. It gives us the following information :

- (a) that he died on the southern solstice day at the beginning of the solar month Māgha.
- (b) that the tithi on the day of his expiry was Śukla eighth.

<sup>4</sup> *Mabābhārata*, Anuśāsana Parva, Ch. 167.

<sup>5</sup> *Mabābhārata*, Udyoga Parva, Ch. 142, V. 18.

- (c) that the war began just 67 days before his death ;  
for he was on the bed of arrows for 58 days ;  
(he was laid on this bed, on the 10th day of the  
war).

Kṛṣṇa made his statement to Kārṇa, as an ultimatum, on the failure of his peace mission to the Kauravas. It gives the following information :

- (a) that the tithi on the first day of the war was Amāvāsyā, and  
(b) that the sun on this amāvāsyā day was in the nakṣatra Jyeṣṭhā.

Combining this statement with that of Bhīṣma, we get the clue to the date of the Bhārata war. In the year of the war, the sun took 67 days, in moving from Jyeṣṭhā to the then southern solstice. In 67 days, the sun moves through  $67^\circ$  approximately. Hence the problem may be put in the following form [assuming the new moon in question, to have ended at the star Jyeṣṭhā (Antares).]—"To find the year when the southern solstice was at a distance of  $67^\circ$  from the *star* Jyeṣṭhā." This is an easy astronomical problem to solve. When worked out, the resulting date would be somewhere in the 15th century B. C. as will be seen later on.

The date of the Bhārata war, as accepted by Professor Sen Gupta, is 2,449 B. C. In this year, the star Jyeṣṭhā was at a distance of  $80^\circ$  from the then southern solstice. So the time that would be taken by the sun to move from Jyeṣṭhā (star) to the southern solstice would be about 80 days. In order to meet this difficulty he had to make necessary changes in the statements of Kṛṣṇa and Bhīṣma to adapt them to his theory. He accepted that there was conjunction of the sun with the *star* Jyeṣṭhā, in amāvāsyā, but rejected that the war began on this date. In Bhīṣma's statement, he accepted that he (Bhīṣma) died on the southern



solstice day and that the war began just 67 days before his expiry. But he rejected the rest. In consequence of these changes the tithi on the first day of the war became  $80-67=13$ th Śukla instead of amāvāsyā as in Kṛṣṇa's statement, and the tithi on the day of Bhīṣma's expiry became Kṛṣṇa 8th instead of Śukla 8th as in Bhīṣma's statement. Similarly, he changed other evidences of the *Mahābhārata* (including the statement of Vyāsadeva and Baladeva) as will be seen later.

It is fortunate for him, that he got support for these changes in a treatise named *Bhārata Sāvitṛī* quoted by Nīlakaṇṭha (16th century A. D.), in his commentary on the *Mahābhārata*. How far this treatise is authentic nobody knows. It might be the production of Nīlakaṇṭha himself. It proposes to reconcile different conflicting statements in the *Mahābhārata* (as they appeared to be, to the author of the *Bhārata Sāvitṛī*) by making changes here and there in the evidences. It was expected of Prof. Sen Gupta to prove first, with sufficient reasons, that the treatise *Bhārata Sāvitṛī*, and its author might be relied on, before accepting it and thereby rejecting Bhīṣma's statement, regarding the tithi at least. He seems to be silent on it. When a statement is accepted, it should be accepted in full, or its value as evidence ceases to exist.

As a matter of fact, all the evidences, in connection with the Bhārata war, given in the *Mahābhārata*, are quite consistent with one another. Had Prof. Sen Gupta not altered statements of Bhīṣma, Kṛṣṇa and others, he would have found the requisite data in the *Mahābhārata* itself, for determining the date of the Bhārata war and would not then have any necessity to take recourse to the dogmatic traditional date as afforded by Varāha-Mihira in his *Brhat-Saṃhitā*.

The date of the Bhārata war according to Mr. Karandikar is 1931 B. C. as we have seen above. As to the tithis

he did not accept the statement of Bhīṣma nor that in the *Bhārata Sānitri*. He followed *Vedāṅga Jyotiṣa* and took the tithi on the date of Bhīṣma's expiry to be the Kṛṣṇa 4th. i. e. the fourth day of the dark half. For, according to the *Vedāṅga Jyotiṣa*, there can be only five tithis on which the 1st of solar Māgha can fall. Of these the Kṛṣṇa 4th is one. Why he selected Kṛṣṇa 4th of all the probable tithis, he did not appear to explain.

According to this selection of the tithi for the date of Bhīṣma's expiry, the first day of the war was, in his opinion, on the Śukla 10th and not amāvāsyā as in Kṛṣṇa's statement and in consequence, the amāvāsyā (as spoken of by Kṛṣṇa to Karṇa) in which the sun and the moon were in conjunction with Jyeṣṭhā, fell on a day just 11 days before the 1st day of the war, i. e. 78 days before Bhīṣma's expiry). This is the same as saying that the sun took about 78 days to reach the then southern solstice from Jyeṣṭhā. In 1,900 A. D., the sun took only 20.8 days to move from Jyeṣṭhā to the southern solstice of that year  $78 - 20.8 = 57.2$  days. This shows that the southern solstice had changed its position, in the interval between Bhārata war and 1,900 A. D. by a space, equivalent to the sun's motion of 57.2 days. Taking  $1^\circ$  roughly to be the daily motion of the sun, the shift, by precession, of the southern solstice during this interval, amounts to  $57^\circ.2$ . Assuming 72 years to be the time for  $1^\circ$  of precession, the interval amounts to  $57.2 \times 72 = 4,118$  years,  $1,900 - 4,118 = -2,218$  A. D. = 2,219 B. C.

Thus, taking the tithi as Kṛṣṇa fourth on the day of Bhīṣma's expiry, makes the date of the Bhārata war at about 2,219 B. C. which does not tally with the year 1931 B.C. as given by him.

Again by actual calculation, the tithi on the southern solstice day for the year 1931 B. C. becomes the Śukla 4th and not Kṛṣṇa 4th as stated by Mr. Karandikar. So there

was a difference of 15 tithis between the actual tithi and that calculated by Mr. Karandikar following the *Vedāṅga Jyotiṣa*. In his opinion, the calendars of tithis, nakṣatras etc., in the time of Yudhiṣṭhira were based on the system of the *Vedāṅga Jyotiṣa* and the people of the time used to follow the same irrespective of the actual tithis or nakṣatras, based on the correct positions of the sun or the moon. Thus, we might as well say, that they could take a full moon night for an amāvāsyā night, without any question. But all this goes against facts. There are enough evidences, in the *Mahābhārata*, that the calendars of the time were based on the real positions of the sun and the moon and that the tithis or the nakṣatras, calculated therefrom, were capable of being tested by observation. We give a few instances below in support of this view:

- (1) When Duryodhana was commanding his army, to start for Kurukṣetra at about 10 P. M. in the night of the Kṛṣṇa 5th, he referred to the moon's rising with the nakṣatra Puṣya.<sup>6</sup>
- (2) Vyāsadeva, in course of a talk, spoke to Dhṛtarāṣṭra, of his observation of the moon and the sky in the full moon night of Kārttika.<sup>7</sup>
- (3) In Bhīṣma's statement we find that the sun had *actually* crossed the southern solstice, on the day of his expiry and that he spoke of it to Yudhiṣṭhira with confidence.

These and other evidences, in the *Mahābhārata* show that the people of the time were not blind followers of calendars based on the faulty system of the *Vedāṅga Jyotiṣa*, but followed calendars giving results from actual positions of the heavenly bodies at the time.

So it is advisable for Mr. Karandikar to readjust his date, so that it might be consistent with all the details. As it is now, it cannot be accepted.

<sup>6</sup> *Mahābhārata*, Udyoga Parva. ch. 150. 3.

<sup>7</sup> *Ibid*, Bhīṣma Parva, ch. 2. 23.

We have seen above that the date of the Bhārata war as accepted by Dr. K. L. Daftari, is 1197 B. C. Dr. Daftari gives the criterion of the year of Bhārata war as follows : “ The year of the War is *minus* 1,695.3 i. e. 1197 B. C. At this time the sun turned to the North when it entered the constellation Dhaniṣṭhā . . . . . Now it is an undisputed fact that the sun was in the Jyeṣṭhā on the amāvāsyā of the Kārtika according to the calender of those days. The maximum number of days after that amāvāsyā that the sun would take to enter the Dhaniṣṭhā is 68 as already shewn.”<sup>8</sup> We shall try to see how far he could follow the requirement.

The southern solstice day in 1197 B. C. fell on the 1st January. J. D. for that day is 1284219. At Kurukṣetra mean noon, the positions of the sun and the moon on this day, are as below :—

Apparent Moon	.. 71° 32' 13"
” Sun	.. 270 7 52
” Diff.	.. 161 24 21
” Tithi	= 13.467 i. e. Śukla 14th but not Śukla 8th as required by Bhīṣma's statement.

Again, according to Bhīṣma and Kṛṣṇa, the war began just 67 days before this, when the tithi was amāvāsyā and the sun was then in Jyeṣṭhā.

The day which was just 67 days before the southern solstice day was the 26th October 1198 B. C. The positions of the sun and the moon on this day (K. M. N.) were :—

Apparent Moon	.. 258 6 42
” Sun	.. 201 50 2
” Diff.	.. 56 16 40
” Tithi	= 4.69 i. e. Śukla 5th and not amāvāsyā as required.

<sup>8</sup> Dr. Daftari's *Astr. Method Chronology of Ancient India*, p. 124.  
F. 2

The moon was not in Jyeṣṭhā as required but she was in Pūrvāṣāḍha which ended at  $258^{\circ} 49'$  (499 A.D.) taking the first point of Dhanīṣṭhā to be  $295^{\circ} 29'$  (499 A.D.)

Longitude of the sun from equinox of date

as given above  $201^{\circ} 50' 2''$

Precession from 1197 B. C. to 499 A.D.  $23 25 38$

The longitude of the sun referred to 499 A.D.  $225 15$   
 $40$  (499<sup>9</sup>)

The nakṣatra Jyeṣṭhā begins and nakṣatra

Anurādhā ends at . . .  $228^{\circ} 49' 0$  (499)

The sun is in nakṣatra Anurādhā. The

longitude of star Jyeṣṭhā  $228^{\circ} 54'$  (499)

The sun is behind the star Jyeṣṭhā by  $3^{\circ} 39'$  or  $3^{\circ}.65'$ .

Taking approximately  $1^{\circ}$  to be the daily motion of the sun, he will take more than  $3\frac{1}{2}$  days to reach the beginning of the nakṣatra Jyeṣṭhā or the star Jyeṣṭhā, from the noon of the first day of the war. Therefore the time that would be taken by the sun to move from Jyeṣṭhā to the then southern solstice would be about  $67 - 3.6$  or  $63.5$  days and not 67 days as required by the statements of Bhīṣma and Kṛṣṇa. So the year 1198-97 B. C. fails to satisfy the requirements of the *Mahābhārata* evidences, and therefore, the year cannot be accepted.

Faced with this difficulty Dr. Daftari shifts his ground and in a letter to me he informed me of his viewpoint as follows :—

“Bhīṣma did not expire on the *actual solstice*<sup>10</sup>, but within two or three days from the *solstice of the Vedāṅga Jyotiṣha*, that occurred after 66 (?) tithis from the अमावास्या of कार्तिक of the *Vedāṅga Jyotiṣa* calendar i. e. after 67 days from the

<sup>9</sup> When the number 499 is placed within brackets after any longitude it would mean that the longitude concerned is referred to the equinox of 499 A. D.

<sup>10</sup> Italics are ours.

beginning of the war. In paragraphs 206-212 I have shown that the Uttarāyaṇa of *Vedāṅga Jyotiṣa* occurred 24.51 days after the real Uttarāyaṇa. Therefore Bīṣhma expired on or about the 26th of January on which the tithi would be 10th of Shukla Paksha. The war therefore began on 21st November (Monday) and ended on 8th December."

In para. 207 of his book he says:<sup>11</sup>

"That the constellation of the moon and the day of the turning of the sun, given in the *Mahābhārata* were arrived at by the wrong process in vogue in those days."

In para 113 of his book, he writes :

"Now in the days of war (minus 1695-198 B. C.) the equinox was 90° to the East of Dhanishtha and the sun turned to the North when it entered the constellation Dhanishtha. So Bhīṣma must have died soon after the sun entered the Dhanishtha according to the calendar of those days . . . . . Therefore the Uttarāyaṇa began within 68 days from Amāvāsyā of Kartika. And Bhīṣma must have died within two days from the beginning of the Uttarāyaṇa. Therefore Bhīṣma must have died within 70 days from the amāvāsyā of the Kartika."

Again, in para 98 he says : "On the Amāvāsyā of the month, named Kārtika by us, the sun was in the Jyēṣṭhā. This happens in the Kārtika in Idavatsara, the third of the cycle of five years of the *Vedāṅga Jyotiṣa* . . . . . The War was therefore begun on or after the Amāvāsyā of the month named Kārtika. It is also thus proved that the War was fought in Idavatsara, the third year of the circle."

From the above we draw the following conclusions :—

- (1) According to Dr. Daftari all data given in the *Mahābhārata*, regarding tithis, nakṣatras solstice days and the like are wrong; for they were arrived at by wrong process then in vogue.
- (2) *Vedāṅga Jyotiṣa* was then used for making calendars of the time.

<sup>11</sup> Dr. Daftari's book is entitled '*The Astronomical Method, and Its Application to The Chronology Of Ancient India.*'

- (3) The tithis, the nakṣatras etc. derived from the system of *Vedāṅga Jyotiṣa* are all wrong.
- (4) According to the *Vedāṅga Jyotiṣa*, the southern solstice was always at the beginning of the nakṣatra Dhaniṣṭhā.
- (5) The sun must be, according to this system, in the nakṣatra Jyēṣṭhā, just 67 days before the southern solstice day, as derived from the *Vedāṅga Jyotiṣa*.

We shall now try to see the consequences of taking 21st November, 1198 B. C. as the beginning of the war. Dr. Daftari follows modern Astronomy in deriving his positions for the sun and the moon for this day. We follow him:

21st November 1198 B. C. Julian days, 1284178 (K. M. N.)

6 A. M. *Kurukṣetra*

Mean sun	228° 7' 42"	Apparent sun	228° 7' 2"
Perigee	228 25 47	"	Moon 228 36 15

Eccentricity 0.018045 Tithi  $\frac{10 \ 29 \ 13}{12} = 0.8735 = 1st \ Śukla$

Mean moon 243 26 23

Apogee 163 58 26

Precession = 23 25 38

Long. of the sun referred to Equinox of 499 A.D.

251° 52' 40" (499)

Long. of moon " " " 262 1 53 (499)

Nakṣatra of the sun is Mūla which ends at 256 29 40 (499)

" " moon is Pūrvāṣāḍha 268 49 (499)

But according to the requirement they ought to have been in the nakṣatra Jyēṣṭhā. But following the *Vedāṅga Jyotiṣa* we have to consider the nakṣatra Mūla to be the nakṣatra Jyēṣṭhā.

The day, 67 days later than the 21st of November, 1198 B. C., is the 27th of January 1197 B.C.

27th of January 1197 B.C. Julian days 1284245 (K.M.N)			
Apparent Sun	296° 19' 17"	Pree.	23° 25' 38" =
			319° 44' 55" (499)
Apparent moon	54 22 18	77°	47' 56" (499)
Difference		8	118 3 1

$$\text{Tithi} = \frac{118.05}{12} = 9.8375 \text{ 10th Śukla}$$

Nakṣatra of the sun is Śatabhiṣā which ends at

		322	9 (499)
„ „ moon is Ārdra	„ „	82	9 (499)

So the southern solstice falls very nearly at the end of the nakṣatra Śatabhiṣā. But according to the *Vedāṅga Jyotiṣa* we have to consider it as the beginning of Dhaniṣṭhā.

Are we then to believe that such eminent persons as Kṛṣṇa, Bhīṣma and Vyāsadeva, who are reputed to have been very wise, very learned, very intelligent, tolerated this state of things and blindly followed such a disreputable system as *Vedāṅga Jyotiṣa*, without even questioning the correctness of the calendar based on it? We cannot conceive of it.

But his stand regarding the positions of planets viz. Mercury, Venus, Mars, Jupiter and Saturna, is quite different from that regarding the positions of the sun and the moon. He gives<sup>12</sup> the positions of the planets for the 21st November 1,198 B. C. i. e. for the 1st day of the battle and got his results from the elements and the processes of the Modern Astronomy by back calculation. It is surprising that the result tallies perfectly with some of the evidences on planets, given in the *Mahābhārata*. This goes to prove that the people of the time were extremely advanced in Astronomy, so as to observe and calculate heavenly bodies accurately.

<sup>12</sup> Page 56 of his book.



But we have seen before that they were according to Dr. Daftari, so very poor in the science of Astronomy, that they took nakṣatra Śatabhiṣa for Dhaniṣṭhā, 27th January 1197 B. C. for 1st of January 1197 B. C. in regard to the sun's passage through the southern solstice and nakṣatra Mūla for Jyeṣṭhā, on the first day of the war. The determination, of the position of the sun and the moon, is much simpler than that of the planets. How is one to explain this anomaly? To be consistent, we are to take the people of the time to be equally competent to observe and calculate the positions of the sun and the moon, as well. If that be so, it was not possible for them to make mistakes, regarding the southern solstice day and the tithis and the nakṣatras of the sun or of the moon on different dates. And as the requirements, in these respects, have not been satisfied, with the year 1198-97 B.C, the year cannot be accepted, as the real date of the Bhārata war.

As to planetary positions, given by Dr. Daftari, it may be said, that they really hold for the year 1198-97 B. C. Most likely, they are the results of observations made by some astronomer in 1198 B. C ; but were, later interpolated into the body of the *Mahābhārata* by the observer himself or by some of his followers.

We shall take up the question of the planetary positions again, later on, and try to see how far the statements, in the *Mahābhārata*, in connection with these, are dependable.

The problem is "To find the date of the Bhārata war" and the data given are the evidences of the *Mahābhārata*. The above scholars assumed their respective dates at the outset and changed the evidences, so that they may fit in with their respective preconceived dates. The procedure adopted by them is objectionable and unjustifiable.

All of these investigators are unanimous about the authenticity of Bhīṣma's statement, as to his death occurring

on the southern solstice day and as to the interval between this date and the date of the beginning of the war.

But, on the third point (i. e. the tithi in the Bhīṣma's statement), they differ. Professor Sen Gupta is against it, as it is antagonistic to his theory. Mr. Karandikar objects to it, as it is against the system of *Vedāṅga Jyotiṣa*, which he follows ; but he did not take the trouble of proving that it was the *Vedāṅga Jyotiṣa* only and no other system, that was in use in the time of the Bhārata war. The author of the *Bhārata Sāvitrī* tried, as mentioned above, to get a reconciliation between the different statements given in the *Mahābhārata*. His endeavour would have been successful and his results welcomed if he had not to change any of the data of the *Mahābhārata*, particularly the tithi in Bhīṣma's statement, which is very famous. We see no reason for this uncalled for change in this famous statement.

Baladeva's statement which has been given later, seems to be in apparent conflict with Kṛṣṇa's statement. Apparently, this led the author of the *Bhārata Sāvitrī* to make wholesale change in the calendar of the year of the Bhārata war. This again, necessitated the change in Bhīṣma's statement as well. All this seems to be unreasonable. In our opinion, Bhīṣma's statement, should have been kept in tact and the statements, that go against it, might have been rejected as spurious. As a matter of fact, Baladeva's statement is not really antagonistic to others. The misinterpretation of the verse, by the comentator Nilakaṇṭha, has produced all this confusion, as will be shown, later on.

#### *Preliminary Steps to the Determination of the date of the Bhārata war.*—

We now proceed, in the following pages, to investigate into the date of the Bhārata war. We propose not to depend on any tradition, nor to assume any date at the very out-set, but to follow, strictly, the evidences in the

*Mahābhārata* alone and thereby try to get to the date of the Bhārata war, if possible.

We shall first try approximate method to get at the time of the war, but propose, later on, to use more rigorous methods to find the correct year which might fit in exactly with the different events, in connection with the Bhārata war as obtained from the *Mahābhārata*.

Bhīṣma's statement, both text and translation, has already been given.<sup>13</sup> Here are two more statements, to show that he really died on the southern solstice day. Vaiṣampāyana says to Janmejaya—

शृणुध्वावहितो राजन् शुचिर्भूत्वा समाहितः ।  
भीष्मस्य कुरुशार्दूल देहोत्सर्गं महात्मनः ॥  
निवृत्तमात्रे त्वयने उत्तरे वै दिवाकरे ।  
समावेशयदात्मानं आत्मन्येव समाहितः ॥<sup>14</sup>

*Translation.*—"O! The Greatest of the Kurus, listen attentively the event of the expiry of the Great Bhīṣma. Just at the moment of the sun's reaching the Winter solstice, he (getting detached from the external senses) concentrated himself to his inner-self.

Bhīṣma asked Yudhiṣṭhira to come to him at the time of his expiry on the southern solstice day :—

आगन्तव्यं च भवता समये मम पार्थिव ।  
विनिवृत्ते दिवाकरे प्रवृत्ते चोत्तरायणे ॥<sup>15</sup>

*Translation.*—Come to me at the time when I would expire, when the Dakṣiṇāyana (sun's southerly course) will just end and the Uttarāyana (sun's northerly course) will begin.

These, along with the statements of Bhīṣma and Kṛṣṇa (as already given) furnish us with the necessary con-

<sup>13</sup> P. 4.

<sup>14</sup> *Mahābhārata*, Śāntiparva, Ch, 47. Verses 2-3.

<sup>15</sup> *Mahābhārata*; Anuśāsana Parva.

ditions for the year of the Bhārata War according to our stand. They are as follows—

- (a) Bhīṣma expired on the southern solstice day.
- (b) The battle began just 67 days before this date.
- (c) On the first day of the battle, the sun was in the nakṣatra Jyeṣṭhā.
- (d) The tithis on the first day of the War and on the day of expiry of Bhīṣma were respectively amāvāsyā and Śukla eighth respectively.

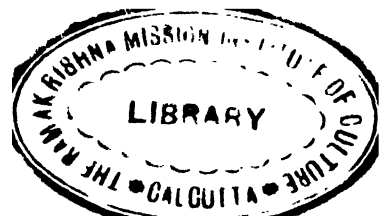
Before taking up the question for solution, we have to make two *provisional* assumptions at the out-set :—

- (1) We accept for the present, that the star  $\beta$  Delphini, the Yogatārā of the nakṣatra Dhaniṣṭhā, marked the first point of the nakṣatra. Its longitude referred to the equinox of 499 A. D. was  $295^{\circ} 29'$ <sup>16</sup>. From our further consideration, later on, we shall find that this was so. The beginnings and the ends of the other nakṣatras were then reckoned really from this point.

(2) In the third condition, given above, the sun ought to be in the nakṣatra Jyeṣṭhā; but it is not mentioned therein, at which particular point of this nakṣatra, the sun then was. The nakṣatra Jyeṣṭhā extends from the longitude  $228^{\circ} 49'$  (499) to  $242^{\circ} 9'$  in the system of 27 nakṣatras<sup>17</sup>. If the sun were at any point between these limits, then, after 67 days, he would be at some point between  $295^{\circ} 49'$  to  $309^{\circ} 9'$  approximately, so that the corresponding southern solstitial point would then be somewhere between these two limits assuming the system of 27 nakṣatras to have been in vogue at the time. The corresponding year of the Bhārata war would then lie somewhere between years 1,370 B. C. and 2,338 B. C. We assume for the present

<sup>16</sup> Burgess' Translation of *Sūrya-Siddhānta*.

<sup>17</sup> *Vide* 499 Appendix B.



that the sun was just in conjunction with the star Jyēṣṭhā (Scorpionis or Antares) at the beginning of the war. But, later on<sup>18</sup> we shall see, that the limits would be narrowed down, from other considerations, proving thereby, that the sun was really very close to the star Jyēṣṭhā, on the 1st day of the war.

The star Jyēṣṭhā (Antares) is fixed in the sky, and is to the west of the southern solstice. The solstice very slowly and gradually changes its position, at the rate of  $1^\circ$  in about 72 years. Its motion is towards the West. So the distance, between the nakṣatra Jyēṣṭhā and the southern solstice, would gradually get less and less, with the time. In the time of the Bhārata war, sun took 67 days to pass from Jyēṣṭhā to the then southern solstice. In 499 A.D. he took 40.2 days, to move from the star Jyēṣṭhā to the southern solstice for that year. In 1900 A.D. he took only 20.8 days, to cover the space from Jyēṣṭhā to the southern solstice of this year. Thus in the interval, between the Bhārata war and 1900 A. D. the solstice shifted through a distance, equal to  $67-20.8$  or  $46.2$  days' journey of the sun, that is, through  $46^\circ.2$  and in the interval between 499 A.D. and 1,900 A. D. i.e. in 1,401 years, the solstice shifted through  $40.2-20.8$  or  $19.4$  days' journey of the sun, that is  $19^\circ.4$ . If we put D for the year of the Bhārata war, then, the interval between the Bhārata war and 1,900 A.D. may be put down as  $1900-D$ . This is practically a question of simple proportion.

$$\frac{1900-D}{1401} = \frac{46.2}{19.4} \therefore 1900-D = \frac{46.2}{19.4} \times 1401 \approx 3335$$

$$D = 1900 - 3335 = -1435 \text{ A. D.} = 1436 \text{ B. C.}$$

Or we may put the problem in another form:—

If 72 years be required to produce a shift of  $1^\circ$  approximately then what would be the time required to produce a shift of  $46^\circ.2$ ?

---

<sup>18</sup> P. 42.

The time required would be

$$46^{\circ}.2 \times 72 = 3327 \text{ years.}$$

But this shift ( $46^{\circ}.2$ ) was assumed to have been produced in 1900-D years.

$$1900 - D = 3327 \text{ years}$$

$$D = 1900 - 3327 = -1427 \text{ A.D.} = 1428 \text{ B. C.}$$

The processes given above are very rough and the results therefrom are only approximate. Still they give us an idea of the probable date of the Bhārata war, which is near about the dates 1428 B. C. and 1436 B. C.

By applying a more rigorous method, we propose to see how far one or the other of these years agrees with our requirements. Let us take up the year 1436 B. C. and test it.

The longitude of Antares in 499 A. D. ..  $228^{\circ}54'$  (499)  
Precession up to 1436 B.C @ 49.73 per

year .. 26.42

The longitude of Antares as well as the true longitude of the Sun in conjunction with

it, in 1436 B. C. from equinox of date ..  $202^{\circ}12'$

Sun's perigee in 1436 B. C. =  $223^{\circ}53'$

Sun's Eccentricity =  $0^{\circ}018143$

Equation ..  $0^{\circ}45'$

Meanlong. of Sun when in conjunction with

Antares ..  $202^{\circ}57'$

Mean motion of Sun in 67 days ..  $66^{\circ}2'$

Mean long. of Sun after 67 days ..  $268^{\circ}59'$

Equation ..  $1^{\circ}30'$

Sun's true longitude after 67 days ..  $270^{\circ}29'$

Thus it appears that the year 1436 is very close to the correct year of the war, as the sun in this case, after leaving Antares reaches very close to southern solstice, the longitude of which is  $270^{\circ} 0'$ , from the equinox of date.

Referring to the fourth condition for the year of the war, we know that the tithi on the southern solstice day

must be Śukla eighth. But none of the years 1,428 B. C. and 1,436 B. C. conforms to the requirement. In the case of the year 1,428 B. C., the tithi on the southern solstitial-day was Śukla eleventh and in the case of 1,436 B. C. it was Śukla 13th. The year 1431 B. C. however, agrees with this requirement. So the year 1431 B. C. might be the required date of the war.

*Events in connection with Bhārata war.*

We shall now test this year and see if the calendar for the year, regarding dates, nakṣatras and tithis, agrees well with astronomical events recorded in the *Mahābhārata*.

All calculations below have been done with the constants and elements of the Modern Astronomy for the meridian of Kurukṣetra.

*(A) Day of Bhīṣma's expiry*

The Southern solstitial passage in this year (1431 B. C.) fell on the 2nd January.

Julian days for this date=1198 752.0 (K. M. N.)

*At mean noon of Kurukṣetra.*

Mean Sun	.. 268° 30' 39"
Perigee	.. 223 58 18
Sun's eccentricity	... 0° 018143
Equation	.. 1 28 48
Apparent longitude of sun	.. 269 59 27
Mean Moon	.. 0 9 58
Perigee of the moon	.. 185 33 28
Moon's asc. node	.. 227 33 36
Equation <sup>19</sup>	.. 0 23 52
Apparent moon	.. 0 3 50

<sup>19</sup> In the case of the moon, in addition to the equation of centre, four other corrections have been applied to get her true position for the day of Bhīṣma's expiry (2nd Jan. 1431 B. C.) and for the 1st day of the battle (27th Oct. 1432 B. C.); for other dates the equation of centre only has been used.

From the longitude of the sun it will be seen that he crossed the southern solstice at about 12 minutes after mean noon. So it was the solstice day and the beginning of the solar Māgha.

The difference between the longitudes of the sun and the moon at mean noon was  $90^{\circ} 34' 23''$ . One titni is equivalent to  $12^{\circ}$  of this difference. Therefore, the tithi at mean noon was  $\frac{90^{\circ} 34'}{12} = 7.547$ . This shows that it was the eighth day of the bright half (Śukla eighth) as required.

A (a) According to Bhīṣma, the three fourths of the lunar month of Māgha expired on the southern solstice day. It proves that the lunar month at the time were Pūrṇimānt i. e. they were considered to begin and end with Pūrṇimā.<sup>20</sup> So it is clear that the lunar month of Māgha began about 22 days before the southern solstice day and it ended about 8 days therefrom.

In Vedic times the month-names were as : Madhu, Mādhava, Śukra, Śuchi, Nabhas, Nabhasya, Iṣa, Ūrja, Sahā, Sahasya, Tapas and Tapasya. Later, they were replaced by other month-names formed after the nakṣatras in which full moon might occur in those respective months. They are as Caitra, Vaiśākha, Jyeṣṭha, Āsāḍha, Śrāvaṇa, Bhādra, Āświna, Kārtika, Mārgaśīrṣa, Pauṣa, Māgha and Phālguna, respectively.

*Amarakoṣa*, the well known Sanskrit Lexicon, gives the rule for framing such month-names. It says :—

पुष्ययुक्ता पीर्णमासी पीषो मासे तु यत्र सा ।

नाम्ना स पीषो माघाद्याह्वैवमेकादशापरि ॥

*Translation.*—The month, in which the full moon occurs in the nakṣatra Puṣya is called Pauṣa. In the same

<sup>20</sup> Kālavarga, between the 1st. line and the 2nd. line of verse 14, called a Prakṣipta verse.



way, names of the remaining eleven months from Māgha onward are formed.

The *Sūryya Siddhānta*.—Also gives a similar rule :

नक्षत्रनाम्ना मासास्तु ज्ञेया पर्वन्त्ययोगतः

*Translation*.—Months are named after the nakṣatras in which a fullmoon may occur.

Hence, in the month of Māgha, the full moon is expected to be completed in the nakṣatra Maghā.

It may be noted here that in the time of Yudhiṣṭhira, the system of 28 nakṣatras (including Abhijit) was in vogue, as will be seen later, when the statement of Mārkaṇḍeya<sup>21</sup> will be taken up for discussion. The nakṣatras were then reckoned from the first point of Dhaniṣṭhā, which was then considered to be the zero point of the sidereal system.

In our calculations, the longitudes, mentioned therein, have been taken from the vernal equinox of date. In 1432-31 B. C., the first point of Dhaniṣṭhā was behind the southern solstice of the year by  $1^{\circ} 10'$ , so that, its longitude referred to the equinox of date was  $270^{\circ} 0' - 1^{\circ} 10' = 268^{\circ} 50'$ . This was behind the then Vernal equinox by  $360^{\circ} - 268^{\circ} 50' = 91^{\circ} 10'$ . Therefore, to ascertain the nakṣatra corresponding to a particular longitude,  $91^{\circ} 10'$  will have to be added to it, to get the correct distance of this point (indicated by the longitude) from the first point of Dhaniṣṭhā ( $\beta$  Delphini).

The table, in the appendix A, gives the longitudes for the beginnings and the ends of all nakṣatras (of the system of 28 as well as of that of the 27 nakṣatras). By referring to this, the nakṣatra corresponding to a longitude (as corrected for Dhaniṣṭhā) will be obtained.

We shall now try to see if the nakṣatra in the full moon following the southern solstice day, was Maghā.

<sup>20a</sup> *Sūryya Siddhānta*

<sup>21</sup> *Mahābhārata*, Vanaparva, Ch. 229, verses 1-11.

At Kurukṣetra mean noon of 9th January 1431 B.C.

Apparent Moon ..  $87^{\circ} 13' 15''$

Apparent Sun ..  $\underline{277 \quad 3 \quad 22}$

Difference ..  $170 \quad 9 \quad 53$

Tithi =  $\frac{170 \quad 9 \quad 53}{12} = 14.1804$  Pūrṇimā

Pūrṇimā began at  $6^h 10^m$  A. M. of the 9th January and ended at 7. 2. A. M. of 10th January, 1431 B. C.

*Nakṣatra.*

Apparent Moon ..  $87^{\circ} 13' 15''$

Add ..  $\underline{91 \quad 10}$   
 $178 \quad 23 \quad 15$

The nakṣatra Maghā extends from  $180^{\circ} 0'$  to  $192^{\circ} 51'$  (Appendix A) Maghā began at  $2^h 43^m$  P. M. of 9th January and Maghā ended at  $1^{\circ} 45'$  P. M. of 10th January 1431 B. C.

The lunar month Māgha ended with the end of the full moon when the lunar month Phālguna began.

(B) *Bhīṣma's fall* (5th November 1432 B. C.).

According to his statement, Bhīṣma was laid on the bed of arrows, 58 days before his expiry i.e. on the 5th of November 1432 B. C. The apparent positions of the sun and of the moon on that date at mean noon were :

Apparent Moon ..  $320^{\circ} 52' 55''$

Apparent Sun ..  $\underline{210 \quad 52 \quad 46}$

Difference ..  $109 \quad 9 \quad 9$

Tithi =  $\frac{109.1525}{12} = 9.096$

The tithi in the morning was the 9th (Śukla). The Śukla 10th began at about noon.

It was the tenth day of the war. So the tithi on the first day of the war should be Amāvāsyā as required and this was just nine days before this date.

(C) *The 1st day of the battle* (27th October 1432 B. C.).

It was this amāvāsyā day on which the sun and the moon were in conjunction at or close to the star Jyeṣṭhā, the divinity of which was Śakra. On the failure of his peace mission, on the 20th October, Kṛṣṇa gave ultimatum to Karṇa, giving the date as the date of the beginning of the war. The position of the moon and the sun at mean noon were :—

*Tithi*

Apparent Moon	..	199°	33'	48"
Apparent Sun	..	201	41	54
Difference	..	357	51	54
$Tithi = \frac{357.865}{12} = 29.822 \text{ Amāvāsyā}$				

Amāvāsyā ended at about 3<sup>h</sup> 46<sup>m</sup> P. M. when the longitude of conjunction was 201° 51' 1."

*Nakṣatra.*

Longitude of Moon at conjunction	201	51
Add .. .. .	91	10
Longitude referred to zero Dhaniṣṭhā	293	1
The nakṣatra Jyeṣṭhā extends from 282° 51' to 295° 43'		
Hence, the moon and the sun at conjunction were in the nakṣatra Jyeṣṭhā.		

The longitude of the star Jyeṣṭhā from

equininox of date	...	..	202°	15'
Add 0	...	..	91	10

The longitude of star Jyeṣṭhā from zero

Dhaniṣṭhā	..	..	293°	25'
-----------	----	----	------	-----

Hence, the conjunction was at a distance of about 24" behind the star Jyeṣṭhā. Thus the results agree with the requirements.

(D) *Date of Kṛṣṇa's statement to Karṇa* (20th October 1432 B. C.)

It has been stated before that Kṛṣṇa made his statement to Karṇa, 7 days before the beginning of the war. The text and the translation thereof have already been given.<sup>22</sup> The tithi on that day was Kṛṣṇa eighth i.e. the eighth tithi of the dark half. The moon was then in the nakṣatra Maghā as implied by the statement. The positions of the sun and the moon at mean noon of that day were :

Apparent Moon	..	90°	0'	19"
Apparent Sun	..	194	34	7
Difference	..	265	26	12 = 264.44
Tithi = $\frac{265.44}{12} = 22.12$ or Kṛṣṇa eighth.				

*Nakṣatra.*

Longitude of moon	..	99	0	19
Add	..	91	10	0
	..	190	10	19

From the table we see that the nakṣatra Maghā begins at 180° 0' and ends at 192° 51'. Hence, the moon was then in the nakṣatra Maghā.

(E) *Duryodhana's statement about the nakṣatra Puṣya* (17th October 1432 B. C.)

Three days earlier, i. e. on the 17th October, Duryodhana commanded his forces to start for Kurukṣetra; he considered the time to be auspicious as the moon then was in the nakṣatra Puṣya and was rising with it.

प्रयाच्च वै कुरुक्षेत्रे पुष्योद्येति पुनः पुनः।<sup>23</sup>

<sup>22</sup> *Vide* p. 4 *Supra*.

<sup>23</sup> *Mabābhārata* Uddyoga Parva, Ch. 250. Verse 3.

*Translation* :—March to Kurukṣetra. Puṣya is rising with the moon (to night).

Apparent moon at sunset	..	64°	1'	34"
Apparent sun at sunset	..	101	45	59
Difference at sunset	..	232	15	35 = 232.26

$$\text{Tithi} = \frac{232.26}{12} = 19.355$$

It is the Kṛṣṇa fifth. It continued throughout the night.

The tithi being Kṛṣṇa fifth, the moon would rise at about 10 P. M. and this was the time when Duryodhana must have made the statement.

*Nakṣatra.*

Moon's apparent longitude	..	64°	1'	34"
Add	..	91	10	
		155	11	34

From the table we find that the nakṣatra Puṣya extends from 154° 17' 9" to 167° 8' 34". Hence, the nakṣatra Puṣya began before sunset and continued throughout the night. So, Duryodhana's statement is verified.

(F) *Vyāsadeva on full-moon in Kṛttikā.* (12th Oct. 1432 B.C.)

In the course of a talk, at the beginning of the war, Vyāsadeva said to Dṛtarāṣṭra, that he had noticed several bad omens, amongst which, he mentioned the appearances of the moon and of the sky in the full moon night just preceding the amāvāsyā on which the battle began. The Moon had then been in the nakṣatra Kṛttikā.

अलक्षः प्रभयाहीनः पूर्णमासीं च कार्तिकीम् ।

चन्द्रोऽभूदग्निवर्णश्च पद्मवर्णं नभस्तले ॥

*Translation.*—The full moon in the nakṣatra Kṛttikā became fire coloured and lustreless in the lotus coloured sky.

The full moon in question occurred on the 12th October 1432 B. C. when the positions of the moon and the sun at sunset were :

Apparent Moon	..	3°	19'	22"	
Apparent Sun	..	186	50	49	
Difference	..	176	28	33	=176.476

$$\text{Tithi} = \frac{176.476}{12} = 14.706$$

It was the full moon night.

*Nakṣatra.*

Apparent Moon	..	3°	19'	22"	
Add	..	91	10		
		94	29	22	

From the table we see that the nakṣatra Kṛttikā extends from 90°0' to 102° 51' 26". Therefore, the moon was in the nakṣatra Kṛttikā as required.

We shall have occasion to revert to this statement later on when discussing the theory of the *Bhārata Sāvitrī*.

(G) *Day of Yudhiṣṭhira's initiation to Aśwamedha*, (10th March 1431 B. C.)

Vyāsadeva told Yudhiṣṭhira, that his initiation to Aśwamedha sacrifice would take place on the full moon day when the moon would be in the nakṣatra Citrā.

चैत्र्यां हि पूर्णिमास्यां तु तव दीक्षा भविष्यति ।<sup>24</sup>

*Translation.*—Your dikṣā (initiation) will take place on the day of full moon in Citrā.

The positions of the moon and the sun at sunset of the 8th March 1431 B. C. were :—

Apparent Moon	..	149°	0'	56"	
Apparent Sun	..	335	44	27	
Difference	..	173	16	29	=173.275

<sup>24</sup> *Mahābhārata*, Aśwamedha Parva, Ch. 72. Verse 4.

$$\text{Tithi} = \frac{173.275}{12} = 14.439$$

Therefore, it was the full moon day.

*Nakṣatra.*

Apparent longitude of moon at sunset

			149°	0'	56"
Add	"	"	91	10	
			240	10	56

From the table we see, the nakṣatra Citrā extends from 231° 25' 42" to 244° 17' 9". Therefore, the moon was in the nakṣatra Citrā as required.

(H) *Kṛṣṇa's departure on peace mission*, [9th October 1432 B. C.]

Kṛṣṇa started for Hastināpura with a peace proposal to the Kauravas in the morning of the 9th October of 1432 B. C. when the moon was in the nakṣatra Revatī. It was on the Śukla twelfth—

ततो व्यपेते तमसि सूर्यो विमल दुद्गते (?) ।

कैमुदे मासि रेवत्यां प्रययौ मधुसूदनः ॥<sup>25</sup>

*Translation.*—After the darkness of the night was dispelled and on the rise of the sun in the clear sky, Kṛṣṇa started in the nakṣatra of Revatī, in the solar month of Ūrja or Kārtika.

This was on the 9th october 1432 B. C. The month was then Kārtika and the nakṣatra, in the morning was Revatī.

The positions of the moon and the sun at sunrise (6 A. M.) were :—

Apparent Moon	..	321	39	17
Apparent Sun	..	183	9	30
Difference	..	138	29	47 = 138.497

<sup>25</sup> *Mahābhārata*, Uddyoga Parva, Ch. 83. Verses 8-22.

$$\text{Titih} = \frac{138.497}{21} = 11.581 = \text{Śukla twelfth.}$$

It began in the previous night at 10<sup>h</sup> 49<sup>m</sup> P. M.

*Nakṣatra.*

Apparent Moon	..	321°	39'	13"
Add	..	91	10	
		412	49	13
		360		
		52	49	13

The nakṣatra Revatī extends from 51° 25' 42 to 64° 17' 9". Therefore, Revatī began at the close of the previous night.

(I) *Statement of Baladeva* (on the 18th day of the war; 13th November, 1432 B. C.).

Undue importance has been given by some to Nilakaṇṭha's commentary to a statement of Baladeva, in which (according to the commentary) Baladeva is supposed to say that he came back on the nakṣatra Śravaṇā after his pilgrimage for 42 days.

चत्वारिंशदहान्यद्य द्वे च मे निःसृतस्य वै ।

पुष्येण संप्रयातोऽस्मि श्रवणे पुनरागतः ॥<sup>26</sup>

*Translation* (According to Nilakaṇṭha).—Today, is the forty second day of my pilgrimage. For, I started in Puṣya and returned in Śravaṇā.

It has already been stated, that, on the first day of the war, the nakṣatra was Jyeṣṭhā. The nakṣatra Śravaṇā is only four nakṣatra, in advance of Jyeṣṭhā. Taking one day approximately the time for the moon, to cross one nakṣatra, she will require only 4 days, to reach Śravaṇā, from Jyeṣṭhā. So, she should reach Śravaṇā on the 5th

<sup>26</sup> *Mahābhārata*, Śalya Parva, Ch. 34 Verse 6.



day of the war and on the last or the 18th day, she ought to be in Punarvasu or Puṣya which is ahead of Jyeṣṭhā, by 17 nakṣatras. Hence, it is evident, that the statement of Baladeva as interpreted above cannot be accepted, as being antagonistic to the other evidences.

But the verse admits of another and a more sensible interpretation. We are to note here, that the words पुष्येण and श्रवणे have different case endings. In श्रवणे we have the 7th case ending, but in पुष्येण it is the 3rd. In expressing the month, the tithi or the nakṣatra, in which something happens or is done, the 7th case ending is most commonly used, with the names of the months and the like, such as :—

माघे मासि, शुक्ले पक्षे, नवम्यां तिथौ, विशाखायां नक्षत्रे etc.

पुष्येण in the sense, *in the nakṣatra Puṣya*, is unusual and is seldom used ; it is particularly so when a length of time is indicated by one of them in the expression. Besides, the use of different case-endings in the same sentence for expressing the same sense i. e. the sense of “ in the nakṣatra ” is very rare and inconsistent. So, we suspect some other meaning to have been attached to it.

The verse may be split up into 3 (three distinct) parts—

(a) चत्वारिंशदहान्यद्य द्वे च मे निःसृतस्य वै पुष्येण,

(b) संप्रयातोऽस्मि श्रवणे,

(c) पुनरागतः,

That is, (a) gives the sense “ To-day is the forty second day of my sojourn or pilgrimage *with* Puṣya ”.

(b) “ I went out *in* the nakṣatra Śravaṇa.”

(c) “ I have now come again back to you.”

In this arrangement, the 3rd case ending to Puṣya, in the 1st part, is grammatically correct by the rule अव्ययकालाभ्यां अपवर्गे तृतीया; by the term अपवर्ग is meant the

completion of an action in respect of time or space. According to the rule, the 3rd case ending should be applied to the word by which the completion is effected. Here 42 days' journey is completed with पुष्य. Hence, by the rule the 3rd case ending should be applied to it. That is why we have पुष्येण in the verse and not पुष्ये which would signify *in* Puṣya. Had the author of the *Mahābhārata* intended to express "in Puṣya" he might have used पुष्ये instead of पुष्येण.

In this light, the translation of the verse should be as follows :—

*Our translation.*—Today, the forty second tithi (lunar day) of my pilgrimage has been completed with the nakṣatra Puṣya ; for I went out in the nakṣatra Śravaṇā ; now I have come again, back to you.

The word "Punah" is significant. It expresses the fact that Baladeva had met the Pāṇdavas in another Puṣya during his pilgrimage ; for, he started in the previous Śravaṇā, 42 tithis before the last day of the war, and a few days before Kṛṣṇa started for Hastināpura on peace mission.

Unlike other statements, here is an attempt, to support the statement by an argument, as if there was somebody to question the validity of the statement. From this, it appears that Baladeva gave his own calculation. He based his statement on the fact, that 42 tithis were nearly equal to 42 nakṣatras (of the system of 28 nakṣatras, then in vogue) 42 tithis=one synodic revolution of the moon of 30 tithis and 12 additional tithis and 42 nakṣatras=one sidereal revolution of the moon of 28 nakṣatras, and additional 14 nakṣatras. On the day of Baladeva's departure, the tithi was the Śukla 7th, and on his return it was Kṛṣṇa 3rd  $7+41=48=30+18$ . It was the eighteenth tithi or Kṛṣṇa third. Similarly, on his day of departure the nakṣatra was Śravaṇā, which numbered 28, with Dhaniṣṭhā being taken as one.  $28+41=69=28\times 2+13$ . The thirteenth nakṣatra from

Dhaniṣṭhā is Puṣya. So, it was said that the 42nd tithi of Baladeva's pilgrimage was completed by Puṣya, for he departed in Śravaṇā.

Thus, we see that the statement of Baladeva is quite in agreement with other statements in connection with the Bhārata battle.

According to this, Baladeva started on the 4th October 1432 B. C. As the statement has been very roughly put and intended for approximate value, we use for our calculation below, only the mean positions of the sun and the moon, which were, as given below :

*Date of departure of Baladeva (4th October 1432 B. C.)*

Mean Moon .. 254 17 20 at Mean noon

Mean Sun .. 179 48 10 " "

Difference ..  $\frac{74 \ 29 \ 16}{12} = 74.4878$

Mean Tithi =  $\frac{74.4878}{12} = 6.2073 = \text{Śukla 7th}$

Nakṣatra Mean Moon .. 254 17 26

Add ..  $\frac{91 \ 10}{12}$   
345 27 26.

Śravaṇā begins at ..  $\frac{347 \ 8 \ 34}{12}$   
I 41 12

The mean nakṣatra Śravaṇā begins at 3<sup>h</sup> 18<sup>m</sup> p. m.

*Date of Return of Baladeva (13th Novr. 1434 B. C.)*

At Mean Noon

Mean Moon . 61° 20' 47"

Mean Sun .  $\frac{219 \ 13 \ 43}{12}$

Difference . 202 7 4 = 202°.1178

Mean Tithi =  $\frac{202.1178}{12} = 16.831$

Kṛṣṇa 2nd. But Kṛṣṇa 3rd. begins at 3<sup>h</sup>. 31<sup>m</sup>. p. m.

*Nakṣatra.*

Mean Moon	..	61°	20'	47"
Add	..	91	10	
	..	152	30	47
The nakṣatra	..	154	17	9
Puṣya begins at				
Difference	..	1	46	22
		1	46	22
		13	20	

$$\frac{1 \ 46 \ 22}{13 \ 20} \times 24 = 3 \text{ h. } 11 \text{ m.}$$

The nakṣatra Puṣya begins at 3<sup>h</sup>. 11<sup>m</sup>. p. m.

All this shows that Baladeva departed in the afternoon of 4th October 1432 B. C. when the tithi was Śukla seventh and nakṣatra was Śravaṇā and returned in the afternoon of the 13th November, 1432 B. C. when the tithi was Kṛṣṇa 3rd and the nakṣatra, Puṣya. Hence, the requirements in this case also are satisfied.

It may be remarked here that the interpretation by Nilakaṇṭha supports the antagonistic theory of the *Bhārata Sāvitrī*, as will be shown, when we take up the question of the *Bhārata Sāvitrī*, later on.

If we accept the view that both the interpretations are equally correct, still then the preference given by Nilakaṇṭha to that which goes against the statements of Kṛṣṇa and Bhīṣma but supports the *Bhārata Sāvitrī*, must be looked upon with an eye of suspicion.

We have considered 9 evidences from the *Mahābhārata*. They have been utilised by other scholars as well, but with different results. The how and why of this have been explained above at some length. We also, have used them and got our result as 1432-31 B. C. for the date of the Bhārata war without introducing any change into them. The calendar for this year, based on the Modern Astronomy tallies well with that of the *Mahābhārata* regarding tithis, nakṣatras, solstice day and the like. So this year (1432-31 B. C.) may be presumed to be the correct year of the war.

*Limits to the Date of Bhārata war*

But we cannot still accept this date at present, unless and until, we can shew that this and no other year, is possible for the Bhārata war. This date has been arrived at by starting with the *assumption*, that the sun was at or very close to the star Jyeṣṭhā in the year of the war and in fact, the sun was behind the star Jyeṣṭhā, by only 33" in the year 1432 B. C. in the amāvasyā, as in Kṛṣṇa's statement. But we have seen before that the exact position of the sun in the nakṣatra has not been specified in that statement. In the absence of this, we may be free to take the sun to be situated at any point of the nakṣatra Jyeṣṭhā with the consequence that the date of the Bhārata war might fall anywhere between the limits 1370 B. C. and 2338 B. C. So the question may, for the present, be left open.

The evidences discussed above, do not help us in this matter. We have to look for further evidences which might narrow down the above limits and ultimately, lead us to a single date. If this date comes in agreement with our finding (1432-31 B. C.), we shall then, be entitled to accept it as the correct date, for the Bhārata war.

We are going to consider some such evidences from the Vedas, the *Mahābhārata* and other sources. They are expected to throw, further light on the question at issue, and furnish us with anterior and posterior limits to the time of the Bhārata war.

*Vedic evidences*

In the Vedic times and for a long time afterwards the years were based on seasons<sup>27</sup> and sacrifices were performed and regulated accordingly. Hence, the years were then tropical.

In the time of *R̥gveda*, there might have been grouping of stars into constellations or nakṣatras, but commonly,

<sup>27</sup> RV. 2.37. 1-3, 1.15, 12, 1-15, 1, 4. 32.2 etc.

the conjunctions of the sun or the moon were referred to the individual stars. But, later, in the time of the *Yajurveda*, the Zodiac was rigidly divided into 27 parts called the Gandharvas<sup>28</sup> or nakṣatras. At the time of *Kṛṣṇa Yajus*, the divisions were complete and references in most cases were to the nakṣatras and not to the individual stars.

The year in the Vedic times, began always from either equinoxes or solstices. Mention is nowhere found of the year ever beginning from any point other than the equinoxes or solstices.

*Kṛṣṇa Yajus and Kṛttikā period.*

*Kṛṣṇa Yajus* (*Taittirīya Samhitā*) gives a complete list of nakṣatras<sup>29</sup> and so also the *Taittirīya Brāhmaṇa*<sup>30</sup> and the *Atharva Veda*<sup>31</sup>. All these lists begin with the nakṣatra Kṛttikā, showing that the year then began with the equinox in Kṛttikā.

There is a group of very small stars (Pleiades) towards the end of the nakṣatra Kṛttikā. They were known as the Kṛttikās. The group appears to consist of 6 or 7 stars. By tradition, the Kṛttikās were wives of seven Ṛṣis (the seven stars of the Ursa Major). The nakṣatra Kṛttikā was spoken of as seven headed and considered to be the head of the Yajña or the year, and belonging to the divinity Agni.<sup>32</sup>

Kṛttikā (nakṣatra) extends over a space of 13° 20' and the period, in which it was crossed over by the Vernal, equinox, was about 1,000 years. The remotest and the nearest limits of this period are respectively 2,560 B. C. and 1,589 B. C.

<sup>28</sup> *Śukla yajus*, 9.7, *Kṛṣṇa Yajus*, 1, 7, 7.

<sup>29</sup> *Kṛṣṇa Yajus*, 4.4.10.

<sup>30</sup> *Taittirīya Brāhmaṇa*, 1. 5. 1.

<sup>31</sup> *Atharva Veda*, 19.7.1-5.

<sup>32</sup> *Kṛṣṇa Yajus*, 5.1.7., *Śatapatha Brāhmaṇa*, 2.1.2.



N. B. We shall have occasion, here and later on; to express positions of stars and the beginnings and the ends of nakṣatras from the equinox of 499 A.D. In such cases, we shall put the number 499 within the brackets after the longitude referred to 499 A. D.

*Nearest limit of the Kṛttikā period*

When the vernal equinox was at the first point of Kṛttikā, the southern solstice was at the end of the first quarter of Dhaniṣṭhā (following the system of 27 nakṣatras). Assuming β Delphini to mark the first point of Dhaniṣṭhās we have—

Longitude of the first point of Dhaniṣṭhā .. 295° 29' (499)

Add  $\frac{1}{4}$  of a nakṣatra .. 3° 20'

Longitude of southern solstice with equinox

was at Kṛttikā .. 298 49 (499)

Longitude of southern solstice referred to

the equinox of date .. 270

Precession in the interval upto 499 A.D. .. 28 49

The interval to 499 A. D. taking Prec.

$$\text{rate} = 49.7124 = \frac{28^\circ 49'}{49''.7124}$$

$$= 2087 \text{ years}$$

∴ The date when equinox was at the beginning

of Kṛttikā = 499-2087

= -1588 A. D.

= 1589 B. C.

The remotest date 2560 B. C. also can be found similarly.

After 1589 B. C. the vernal equinox stepped into the nakṣatra Bharaṇī:

*An Astronomical reform in the Mahābhārata*

There is a statement in the *Mahābhārata*, in which Mārkaṇḍeya, a great sage, is said to have narrated the story of the Kṛttikās to Pāṇḍavas, in the presence of Vyāsadeva, when they were in exile. It purports to say that the vernal

equinox had then shifted from the nakṣatra Kṛttikā to the nakṣatra Bharanī, but added that the Kṛttikā had been granted a fresh lease of heavenly life by inclusion of Abhijit in the System of nakṣatras. This would prove that the time of Yudhiṣṭhira, to whom all this was said, was posterior to the time when the vernal equinox just crossed the first point of the nakṣatra Kṛttikā and entered into the nakṣatra Bharanī, that is, to 1589 B. C. the nearest epoch of the Kṛttikā period.

Mārkaṇḍeya's statement runs as follows :—

श्रिया जुष्टं महासेनं देवसेनापतिं कृतम् ।  
 सप्तर्षिपुत्रः षड्देव्यस्तत् सकाशमयागमन् ॥ पत्न्यः  
 ऋषिभिः संरित्यक्ता धर्मयुक्ता महाव्रताः ।  
 द्रुतमागत्य चोचुस्ता देवसेनापतिं प्रभुम् ॥  
 वयं पुत्रं परित्यक्ता भर्तृभिः देवसम्मिताः ।  
 अकारणात् रुषा तैस्तु पुण्यस्थानात् परिच्युताः ॥  
 अस्माभिः किल जातस्त्वं इति केनाप्युदाहृतम् ।  
 तत् सत्यमेव संश्रुत्य तस्मान्नस्त्रातुमर्हसि ॥  
 अक्षयश्च भवेत् स्वर्गस्त्वत् प्रसादाद् हि नः प्रभो ।  
 त्वां पुत्रं चाप्यभोक्ष्यामः कृत्वैतदनृणो भव ॥ पत्न्या  
 स्कन्द उवाच—

मातरो हि भवत्यो मे सुतो वोहमनिन्दिता ।  
 यद् वापीच्छत तत् सर्वं संभविष्यति वस्तथा ॥  
 विवक्षतं ततः शक्रं किं कार्यमिति सोऽब्रवीत् ।  
 उक्तं स्कन्देन ब्रुहीति सोऽब्रवीद् वासवस्तथा ॥  
 अभिजित् स्पर्धमाना तु रोहिण्यां कन्यसी स्वसा ।  
 इच्छन्तो जेष्ठतां तात तपस्तप्तुं वनं गता ।  
 तत्र मूढोऽस्मि भद्रं ते नक्षत्रं गगनाच्च्युतम् ।  
 कालं त्विमं परं स्कन्द ब्रह्मणा सह चिन्तय ॥  
 धनिष्ठादि तदा कालो ब्रह्मणा परिकल्पितः ।  
 रोहिणी ह्यभवत् पूर्व्यं एवं संख्या समाभवत् ॥  
 एवं उक्ते तु शक्रेण कृत्तिकास्त्रिदिवं गताः ।  
 नक्षत्रं सप्तशीर्षाभिं भाति तद् वह्निर्देवतम् ॥



*Translation.*—The six Divine Ladies (Kṛttikās=Pleiades,) the wives of the seven Ṛṣis (Ursa Major) came to Mahāsena (Skanda), who had been made the Commander-in-Chief of the Devas and was blessed with Fortune. They were highly pious and religious, but had still been deserted by their husbands. On coming to the Lord of the Deva armies, they said to him “We, O Son, have been deserted by our Divine but angry husbands and displaced from our holy and rightful place. They (the husbands) heard from some body, that you had been born of us. Now rescue us from this calamity. By your grace, O Lord! we may have eternal heaven. We wish you to be our son. Get discharged of your debt by doing this.” Skanda said, “O Blameless Ones! you are my mothers and I am your son; so whatever you desire will be done”. Seeing Śakra about to say “What is to be done”, Skanda told him to speak out. On this Śakra said “Abhijit, the younger sister to Rohiṇī (Jyeṣṭhā) got envious of her (Rohiṇī) and desirous of attaining the position similar to her (place in the system of nakṣatras) went out to the forest for penance. I am confounded again to see that your auspicious nakṣatra (Kṛttikā) has been displaced from its position in the heavens. So O Skanda! find out a solution of (change in) Kāla (time) (that would be affected by the proposed restitution of Kṛttikā and the inclusion of Abhijit in the nakṣatras), in consultation with Brahmā”. On this (that is, after the consultation), Brahmā made the number of nakṣatras *even* (by admitting Abhijit into the already existing system of nakṣatras, the number of which was *odd*, being 27), ordained the Kāla (time) to be taken in reference to the beginning of the nakṣatra Dhaniṣṭhā, and thus caused a shifting of Rohiṇī (Jyeṣṭhā star) towards the east. On seeing their demand satisfied, the Kṛttikās went back to the heaven and the seven headed nakṣatra Kṛttikā (the divinity of which was Agni or Fire) continued to shine in the skies as before.

The above passages have been taken notice of, by scholars of Ancient Indian History, among whom may be mentioned the names of Professor P. C. Sen Gupta and the

late Dr. R. Sham Sastri. Both of them omitted, in their quotations, the first seven verses.

In verse 9, we have भद्रं ते नक्षत्रं गगनाच्च्युतम् as spoken of by Śakra to Skanda. Dr. Sastri took it to mean "Your nakṣatra Bhadrā (or Pūrvabhādrapada) has been displaced from the heavens". It is clearly inadmissible. ~~that~~ ते नक्षत्रं means nakṣatra of Skanda i. e. the nakṣatra Kṛttikā and not Bhādrapada. Skanda was the assumed son of the Kṛttikās. The Kṛttikās being six in number (verse 1) the surname of Skanda was Ṣaḍānana (six faced), besides Skanda was also named as Kārtikeya being the son of the Kṛttikās (verse 3). Again the Kṛttikās, and not the Bhādrapada, said that they had been displaced from heaven (verse 3) and wanted to be reinstated (verse 4) and went back to the heavens when this demand was satisfied (verse 11). So naturally, the nakṣatra Kṛttikā belonged to Skanda and that is why Śakra said to Skanda that your nakṣatra had been displaced from the heavens. The word *Bhadram* is evidently an adjective to the word *nakṣatram*, meaning 'noble or auspicious' and nothing else.

The same reason is applicable to the interpretation of Professor P. C. Sen Gupta who takes ते नक्षत्रं to mean *Abhijit*. But *Abhijit* has no earthly connection with Skanda and hence, cannot be called the nakṣatra of Skanda. Besides, nowhere in the verses is stated, that *Abhijit* was ever displaced. Again, *Abhijit* was not a nakṣatra at all before this. She was only striving for getting into the list of nakṣatras. Moreover, the interpretation of Professor Sen Gupta goes against the statements, made in the verses from 1 to 7 and in 11.

Divested of allegory, the plain meaning of the passages seems to be as follows:—

People were accustomed, in the Kṛttikā Period to see the vernal equinox to be always associated with the nakṣatra Kṛttikā. Now when the Vernal Equinox crossed

the first point of Kṛttikā and shifted backward into Bharanī, they still wanted to retain the association of Kṛttikā with the vernal equinox and to get the first of Kṛttikā to be extended backward by some make-shift, if possible. A school of Astronomers of the time favoured this and the idea was put into effect by inclusion of Abhijit, into the previous system of 27 nakṣatras as an additional nakṣatra, making the system thereby to consist of 28 nakṣatras.

The addition of a nakṣatra would necessarily change the configuration of the former system. Time was expressed in those days in terms of tithis and nakṣatras, i. e., by the positions of the moon and the sun, in respect to the nakṣatras. Now the question arose how one was to know when a particular nakṣatra would exactly commence or end, in the present system; for this purpose, the first point of Dhaniṣṭhā, in the new system of 28 nakṣatras was kept indentical with that of the older system of 27 nakṣatras. The beginnings and the ends of the other nakṣatras were then taken at equal distances of  $\frac{90}{7}^\circ$  per nakṣatra, along the circle of the ecliptic. Thus when the first point of Dhaniṣṭhā was fixed, the beginnings and the ends of the other nakṣatras and also the corresponding times of the entry of the moon and the sun therein got automatically fixed. This is why it has been stated that धनिष्ठादि तदा कालो ब्रह्मणा परिकल्पितः<sup>33</sup>।

In the table, in the appendix A, have been given the distances of the beginnings and the ends of all the nakṣatras, of both the old and the new system from the first point of Dhaniṣṭhā. In order to ascertain, the actual longitudes of the beginning and the end of a particular nakṣatra, we have only to add the distances of these points (as given in the table) to the longitude of the first point of Dhaniṣṭhā. The results would then be the required longitudes.

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<sup>33</sup> Verse 10.

Looking at the table it will be seen that by this arrangement, the longitude of the end of the third quarter of Bharanī of the old system has become identical with that of the first point of Kṛttikā of the new system. For these points are at a distance of  $90^\circ$  from the first point of Dhaniṣṭhā. This shows that, by this change, the nakṣatra Kṛttikā has been extended by  $3\frac{1}{3}^\circ$  only. That is, Kṛttikā has been, as it were, granted an extension of heavenly life for about 242 years, the time that would be taken by the vernal equinox to pass over  $3\frac{1}{3}^\circ$  by precession.

Let us see how it has affected the star Rohiṇī (Jyeṣṭhā Antares). *In the old system,*

The longitude of the <i>star</i> Jyeṣṭhā	.. 228° 54' (499)
The longitude of the first point of	
Dhaniṣṭhā Less.	.. <u>295 29 (499)</u>
Distance of the star Jyeṣṭhā from 1st point	
of Dhaniṣṭhā	.. 293 25 (499)
Beginning of the <i>nakṣatra</i> Jyeṣṭhā in old	
system (from Table)	.. <u>293 20</u> 0 5

This shows that the *star* Jyeṣṭhā was only 5' in advance of the beginning of the *nakṣatra* Jyeṣṭhā in the old system.

*According to the new system* the longi-

tude of the beginning of nakṣatra	
Jyeṣṭhā	.. 282 51 26
Longitude of the star Jyeṣṭhā (as above)	<u>293 25</u>
The distance of the star Jyeṣṭhā from the	
first point of Dhaniṣṭhā (new system)	10 33 34

This shows that by the new arrangement the star Jyeṣṭhā (Rohiṇī) has been shifted towards the east by more than  $\frac{3}{4}$  of a nakṣatra. So it has been stated in verse 10, that रोहिणी ह्यभवत् पूर्वम्.

We have seen, that by the inclusion of Abhijit, in the former system of nakṣatras, an extension of only  $3\frac{1}{3}^\circ$

was obtained for the first point of Kṛttikā. The method adopted, for getting this extension, cannot further be applied to get a further extension. When the equinox would cross the limiting position (i. e. the end of the third quarter of Bharanī in the old system), the vernal equinox would cease to be even in this extended portion of Kṛttikā and get separated from the Kṛttikā for good, and then, in the language of the verse, it would be permanently displaced from the heaven, without any further possibility of its ever getting back to it. We can find the time when the vernal equinox left Kṛttikā finally as follows.

Longitude of 1st point of Dhaniṣṭhā .. 295° 20' (499)

Long. of 1st point of Dhaniṣṭhā from equinox at 1st point of Kṛttikā (new system).. 270° 0'

Precession in the interval .. 25° 29'

With Precesional rate 49".739, the interval

$$= \frac{25}{49} \frac{29}{739} = 1845 \text{ years}$$

∴ The required date when vernal equinox crossed the 1st point of Kṛttikā (new system)

.. 499-1845

= - 1346 A.D.=1347 B. C.

In Mārkaṇḍeya's statement, we have seen that Kṛttikā was displaced (1589 B. C.) but reinstated i. e. the vernal equinox crossed the first point of Kṛttikā in the old system of 27 nakṣatras but by introducing Abhijit in the old system, it was possible to get an extension of Kṛttikā by 3½°. At the time, when Mārkaṇḍeya spoke to Yudhiṣṭhira, the vernal equinox was still in this extended portion.

Therefore it is evident that the time of Yudhiṣṭhira was between *the limits* 1347 B. C. and 1589 B. C.

We may draw some important inferences from what has been discussed above—

- (1) The extension of the nakṣatra Kṛttikā to the end of the third quarter of Bharanī, by the inclusion

of Abhijit, presupposes the knowledge, on the part of the astronomers of the time, of the slow motion of the equinoxes or solstices, towards the west.

In Vedic texts<sup>34</sup>, we come across statements showing that the star Aldebaran (Rohiṇī) once occupied the vernal equinox, when the then southern solstice was at the star Śatabhiṣā. This fact as well as the previous shifting of the vernal equinox from Aldebaran (Rohiṇī) to the first point of Kṛttikā (of the old system) were also known to the astronomers of the time of Yudhiṣṭhira.

Later, we have references of the vernal equinox to have reached the end of the third quarter of Bharāṇī, with the corresponding shifts of the northern and southern solstices to the middle of Aśleṣā and the beginning of Dhaniṣṭhā respectively<sup>35</sup> and still later, of the shift of the northern solstice to Punarvasu (Geminorum or Castor) in *Pañca-Siddhāntikā* of Varāha<sup>36</sup>.

We do not know for certain what particular rate of motions the ancient astronomers assigned, to the precession; but it may be assumed, from the fairly advanced system of calendar of events recorded in the *Mahābhārata*, that it was not very far from the correct value.

(2) Abhijit was admitted into the system of nakṣatras only to produce a shift of  $3\frac{1}{3}^\circ$  to the first point of Kṛttikā. So its function was over, when the vernal equinox reached this limit in 1347 B. C. It appears likely that it was then discarded and the older system of 27 nakṣatras was again reverted to. Abhijit had thenceforward only a historical interest and was looked upon and used as such in the Purāṇas and other works, in later times.

Assuming the system of 27 nakṣatras to have been in use at the time of Yudhiṣṭhira, we arrived at the limits

<sup>34</sup> RV. Mandals 2 and 3.

<sup>35</sup> *Baudhāyana Śrauta Sūtra* 2.6-29

<sup>36</sup> Ch. 3, 21.

for the Bhārata war as 1370 B. C. and 2338 B. C.<sup>37</sup>. But from the discussions of the statement of Mārkaṇḍeya, we learn that the system of 28 nakṣatras (new system) was in vogue at the time and not the system of 27 nakṣatras (the old system). So when speaking of nakṣatra Jyeṣṭhā, in which the sun was, on the first day of the war, Kṛṣṇa must have meant it, to be of the new system, as was then prevalent.

As the beginning and the end of the nakṣatra Jyeṣṭhā in the new system differed widely from those in the old system, the corresponding time-limits in the former, must, of necessity, differ equally so from those in the latter and in fact, the limits to the date of the Bhārata war in the new system, are as 678 B. C. and 1604 B.C. This is explained below :—

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Limits to the date of Bhārata war (New System)

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Distance of the beginning of Nakṣatra Jyeṣṭhā from 1st of Dhaniṣṭhā ..	282 51	Dist. of end of Jyeṣṭhā from 1st pt. of Dhaniṣṭhā	295 43
Long. of 1st pt. of Dhaniṣṭhā ..	295 29 (499)	Long. of 1st pt. of Dhaniṣṭhā ..	295 29 (499)
Add.	578 20	Add	591 12
Deduct ..	360 0	Deduct ..	360 0
Long. of beginning of Jyeṣṭhā ..	218 20 (499)	Long. of end of Jyeṣṭhā ..	231 12 (499)
Ch. in app. long. of sun in 61 days about ..	68 0	Ch. in app. long. of sun in 67 days about ..	68 0
Long. of southern solstice ..	286° 20' (499)	Long. of southern solstice ..	299° 12' (499)
Southern solstice from equinox of date ..	270	Southern solstice from equinox of date ..	270

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## Limits to the date of Bhārata war (New System)—(continued)

∴ Precession to 499 A.D.	16° 20'	∴ Precession to 499 A.D.	29° 12'
Assuming Pre. 1° per 72 years	..	Assuming Pre. 1° per 72 years.	..
The interval to 499 A.D.	1176 years	The int. to 499 A.D.	2192 years
Deduct from ..	499	Deduct from ..	499
Corresponding dates of Bhārata war.	-677 A.D.	Corresponding date of Bhārata war.	1693 A.D.
Nearest limit ..	= 678 B. C.	Remotest limit ..	1694 B. C

Therefore, it is evident that the longitude of the southern solstice in 678 B. C. was  $286^{\circ} 20'$  (499) and that in 1694 B.C. was  $299^{\circ} 12'$  (499). Hence, the southern solstice was behind the first point of Dhaniṣṭhā, in 678 B. C., by  $295^{\circ} 29' - 286^{\circ} 20'$  or  $9^{\circ} 9'$ . This shows that it was then in the nakṣatra Śravaṇā. In 1694 B. C. the longitude of the southern solstice was in advance of the 1st point of Dhaniṣṭhā by  $299^{\circ} 12' - 295^{\circ} 29'$  or  $3^{\circ} 43'$  i. e. it was then a little beyond the 1st quarter of Dhaniṣṭhā.

As the new system was introduced in 1589 B. C. and the time of Yudhiṣṭhira was later than that we need not consider dates beyond 1589 B.C. We have now to see which year after 1589 B. C. conforms completely with the requirements, as indicated in the evidences of the *Mahābhārata*, for the year of the Bhārata war.

It is not necessary to test all the years, from 1589 B. C. to 1431 B. C.; for, the tithis recur at the interval of every 19 years. We have seen that the year. 1432-31 B. C. agrees perfectly with the requirements. So, it would be enough to try only those years which are at intervals of 19 years from 1431 B.C. backwards.

We shall take up and try for only two dates from each of these years viz. (1) The day of Bhīṣma's expiry and (2) the first day of the war.



The requirements for the first of these days, are that the southern solstitial passage and the middle of Śukla eighth, should take place at or before the noon of that day, as Bhīṣma is considered to have died in the afternoon of that day. The requirements for the second of these dates are that the day must be an Amāvāsyā day and that the day must begin with Amāvāsyā at sunrise of that day, as was customary to name a civil day by a tithi.

If any year fails to satisfy these requirements it must have to be rejected.

The following table gives all the details required, with reasons as to why they had to be rejected.

*Possible years of Bhārata war (between 1431 B.C. to 1589 B.C.)*

Years		Day of Bhīṣma's expiry	First day of war	Reasons for rejection
1583 B. C.	Date	3rd. Jan. 1583 B. C.	28th Oct. 1584 B. C.	On the 1st day of the war tithi is Śukla 1st in- stead of Amā- vāsyā as requi- red.
	App. Moon	359.35	208.82	
	App. Sun	268.87	201.61	
	Difference	90.48	7.21	
	Tithi ..	7.54	0.6011	
		Śukla 8th.	ukla 1st.	
1564 B. C.	Date	3rd Jan. 1564 B. C.	28th Oct. 1565 B. C.	Solstitial passage was after Sunset and the tithi Śukla 9th. on the 1st day of the war tithi was Śukla 1st.
	App. Moon	8°.34	211°.51	
	App. Sun	270.27	202.00	
	Diff. ..	98.97	10.51	
	Tithi ..	8.067	29.60	
		Śukla 9th.	Śukla 1st.	
1545 B. C.	Date	3rd Jan. 1545 B. C.	28th. Oct. 1546 B. C.	Solstitial pass- age after mid- night. So S.S. is on 4th when tithi Śukla 9th completed at noon.
	App. Moon	6°.46	196°.58	
	App. Sun	269.65	201.33	
	Diff. ..	96.81	355.25	
	Tithi ..	8.067	29.60	
		Śukla 9th.	Amāvāsyā	

Possible years of Bhārata War (between 1431 B.C. to 1389) B.C.—*contd.*

Years		Day of Bhīṣ- ma's expiry	First day of War	Reasons for rejection
1526 B. C.	Date	3rd Jan. 1526 B. C.	28th. Oct. 1527 B. C.	Tithi on S. S. day was Śukla 9th.
	App. Moon	11°.94	196°.80	
	App. Sun	270.04	201.77	
	Diff. ..	101.90	355.03	
	Tithi ..	8'.49	29.69	
		Śukla 9th.	Amāvāsyā	
1507 B. C.	Date	2nd Jan. 1507 B. C.	27th. Oct. 1508 B. C.	1st day of War begins with Kṛṣṇa 14th and not Amāvāsyā.
	App. Moon	359°.35	189°.10	
	App. Sun	269.45	201.14	
	Diff. ..	89.90	347.96	
	Tithi ..	7.49	28.99	
		Śukla 8th.	Kṛṣṇa 14th.	
1488 B. C.	Date	2nd Jan. 1488 B. C.	27th Oct. 1489 B. C.	S. S. passage takes place after midnight. So the next day is S. S. day when the tithi was 9th
	App. Moon	357°.93	198°.80	
	App. Sun	269.72	201.53	
	Diff. ..	88.21	357.26	
	Tithi ..	7.35	29.77	
	=	Śukla 8th.	Amāvāsyā	
1469 B. C.	Date	3rd. Jan. 1469 B. C.	28th. Oct. 1470 B. C.	1st day of war falls on śukla 1st instead of on Amāvāsyā.
	App. Moon	357°.32	205°.82	
	App. Sun	270.21	201.93	
	Diff. ..	87.11	3.89	
	Tithi ..	7.26	0.24	
	=	Śukla 8th.	Śukla 1st.	
1450 B. C.	Date	2nd. Jan. 1450 B. C.	27th. Oct. 1451 B. C.	Tithi on S. S. day was Śukla 7th on 3rd Jan. 1st day of War falls on tithi Śukla 1st.
	App. Moon	351°.84	208°.81	
	App. Sun	269.60	201.61	
	Diff. ..	82.24	7.30	
	Tithi ..	6.85	0.61	
	=	Śukla 7th.	Śukla 1st.	

We may try two possible years after 1431 B. C. though there is no necessity for it. For, it would then take us to the time of Parikṣit, the grandson of Arjuna, as will be presently seen in our next discussion on the north Solstitial Colure, for the time.

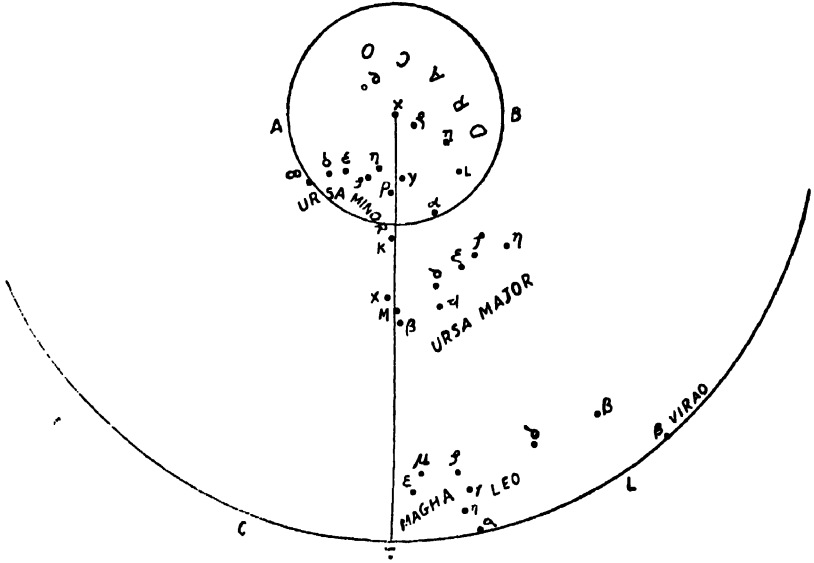
Possible years of Bhārata War after 1451 B.C.

Year		Day of Bhīṣma's expiry	First day of War	Reasons for rejection
1412 B. C.	Date	2nd. Jan. 1412 B. C.	27th. Oct. 1413 B. C.	S. S. day on Śukla 9th.
	App. Moon	10°.13	198°.90	
	App. Sun	270.38	202.09	
	Diff. ..	99.75	356.81	
	Tithi ..	8.32	29.73	
	=	Śukla 9th.	Amāvāsyā	
1393 B. C.	Date	2nd. Jan. 1393 B. C.	27th. Oct. 1394 B. C.	S. S. day on 3rd. Jan. 1393 B. C.
	App. Moon	3°.27	189°.25	and tithi on
	App. Sun	269.77	201.47	this day is 9th
	Diff. =	93.50	347.78	(Śukla), Tithi
	Tithi ..	7.79	28.98	on the 1st day
	=	Śukla 8th.	Kṛṣṇa 14th.	of War is
				Kṛṣṇa 14th,
				Amāvāsyā began at noon.

From the above results, it appears that no year other than 1432-31 B. C. is possible for the Bhārata war. *So, it may now be accepted as the correct date of the Bhārata war.*

*Maghī Saptarṣi Rekḥā (Solstitial Colure)*

To facilitate a clear understanding of the subject under discussion, a star map is given below.—



Solstitial Colure in Parikṣit's time

It represents a portion of the sky, north of the ecliptic containing the constellations, Ursa Minor, Ursa Major, Draco and Leo.

The arc CL represents the ecliptic and X, the pole of the ecliptic. AB represents the circle (Polar circle) along which the celestial pole (the pole of the celestial equator) gradually shifts towards the West.

Ursa Major consists of stars  $\alpha$ ,  $\beta$ ,  $\gamma$ ,  $\delta$ ,  $\epsilon$ ,  $\zeta$  and  $\eta$ . It is known as Saptarṣi in Sanskrit Literature and in Indian Astronomy.

Draco consists of the stars  $\lambda$ ,  $\kappa$ ,  $\alpha$ ,  $\iota$ ,  $\eta$ ,  $\zeta$ ,  $\beta$ ,  $\gamma$  and  $\delta$ . The pole X of the ecliptic is, about, the middle of the stars  $\zeta$  and  $\delta$ . Formerly, this constellation, without the stars  $\lambda$  and  $\kappa$ , was known by the name of Uttānapāda.

Ursa Minor consists of  $\alpha$ ,  $\delta$ ,  $\epsilon$ ,  $\zeta$ ,  $\beta$ ,  $\gamma$  and  $\eta$ . The star  $\alpha$  is the present celestial pole. Formerly, this constellation, with  $k$  Draconis, formed the well-known constellation Śiśumāra of the Ancient Sanskrit Literature.  $k$  Draconis was the pole star at some distant date. It was then called the Dhruva and was at the tail of the Śiśumāra (meaning Porpoise) whereas  $\alpha$  Ursa Minoris was at its head.

Leo consists of  $\alpha$ ,  $\eta$ ,  $\gamma$ ,  $\zeta$ ,  $\mu$ ,  $\epsilon$ ,  $\delta$ ,  $\beta$  etc. Of these the first six stars constitute the wellknown nakṣatra Maghā of Indian Astronomy.

The solstitial colure was associated with the Ursa Major for about 3000 years from about 4270 B. C. to 1260 B. C. At the extreme limit, when it passed through  $\eta$  Ursa Majoris ( मरोच्चि ),  $\beta$  Virginis marked the northern solstice. At the Rohinī epoch, i. e., when the vernal equinox was at or close to  $\alpha$  Taurii ( रोहिणी ) about 3050 B. C., the solstitial colure passed by  $\alpha$  Draconis (the then Pole Star),  $\epsilon$  Ursa Majoris ( अंगिरा ) and  $\delta$  Leonis ( पूर्वफल्गुनी ). In 2328 B. C. the colure passed through  $\alpha$  Leonis (the star मघा) and by  $\gamma$  Ursa Majoris ( पुलस्त्य ) and  $\delta$  Ursa Majoris ( अत्रि ). The colure passed through  $\epsilon$  Leonis and  $\beta$  Ursa Majoris ( पुलह ), when the equinox was at the beginning of the nakṣatra Kṛttikā (of the old system i. e. of 27 nakṣatras). It passed out of Ursa Major by  $\alpha$  Ursa Majoris in about 1260 B. C.

References are available in the *R̥g-Veda* (mainly in the 2nd and the 3rd Maṇḍalas) of the then pole star, the solstice and the solstitial colure passing through  $\epsilon$  Ursa Majoris ( अंगिरा ).

*Atharva-Veda* gives a list of nakṣatras. The list contains 28 nakṣatras, including Abhijit and begins with Kṛttikā, as in *Kṛṣṇa-Yajur-Veda*. In connection with the nakṣatra Maghā, it says अयनं मघा मे. This means that, the solstitial colure then passed through Maghā. As the list is

concerned with the nakṣatras only and not the stars, the extract simply means that the solstitial colure then passed through some point of the *nakṣatra* Maghā. It did not mean the star Maghā.

That the star Maghā has not been intended here, will be confirmed by the following reasons :

(1) From the table (Appendix B), it will be seen that the beginning and the end of the constellation Maghā in the system of 28 nakṣatras are respectively  $115^{\circ} 29'$  (499) and  $128^{\circ} 20'$  (499) and the longitude of the star Maghā is  $128^{\circ} 58'$  (499). Hence, the *star* Maghā is outside the *nakṣatra* Maghā and in advance of the latter by about  $39'$ . So, the Ayana or the solstitial colure could not have passed through the star Maghā according to the *Atharva Veda*.

(2) The system of 28 nakṣatras was started when Abhijit was first included in the older system of nakṣatras and this was about 1589 B. C. and not before that date, as has been shown before. So the list of nakṣatras in the *Atharva Veda* which follows the system of 28 nakṣatras must have been written and inserted into the main body on or after this date. In 1589 B. C. the position of the solstitial colure was at  $118^{\circ} 49'$ . The colure then passed through  $\epsilon$  Leonis and  $\beta$  Ursa Majoris. This position was then behind the star Maghā ( $\alpha$  Leonis) by  $128^{\circ} 58' - 118^{\circ} 49'$  or  $10^{\circ} 9'$ . We have already seen that the time of Yudhiṣṭhira was posterior to 1589 B. C.; hence, the position of the northern solstitial colure in his time must have been still further back.

The statement of *Atharva-Veda* regarding the solstitial colure ever passing through the nakṣatra Maghā seems to be the first. There is no other earlier record available connecting Maghā with the solstitial colure. Later on, other writers also referred to it. But no where do we find any reference to the colure passing through the *star* Maghā in Yudhiṣṭhira's time.

When Varāha Mihira said—

आसन् मवासु मुनयः शासति पृथ्वीं युधिष्ठिरे नृपतौ

he must have meant that in the time of Yudhiṣṭhira the solstitial colure passed through the *nakṣatra* Maghā and not through the *star* of that name, and this is indicated by the plural inflection used with Maghā. This statement however, expresses the strong tradition in favour of the colure passing through the Ursa Major and the *constellation* Maghā (Leo) in the time of Yudhiṣṭhira. We have seen that this time cannot be earlier than 1431 B. C. and in this year the colure passed through the point  $116^{\circ} 39'$  of the ecliptic and some point in the Ursa Major, between  $\alpha$  Ursa Majoris and  $\beta$  Ursa Majoris, a little nearer to the latter.

We have a more direct and pointed statement, in many of the Purāṇas,<sup>38</sup> to the effect, that in the time of Parikṣit, the grand-son of Arjuna, the colure passed through the middle of the line joining the stars  $\alpha$  and  $\beta$  Ursa Majoris and by the star  $k$  Draconis, the then Polestar. *Matsya Purāṇa* gives the statement as follows:—

सप्तर्षीणां च यौ पूर्वो दृश्येते ह्यदितौ निशि ।

तयोर्मध्ये तु नक्षत्रं दृश्यते यत् समं दिवि ॥

तेन सप्तर्षयो युक्तास्तिष्ठत्यब्दशतं नृणाम् ।

नक्षत्राणामृषीणां च योगस्येतन्निर्दर्शनम् ॥

सप्तर्षयो मघायुक्ता काले पारिक्षिते शतम् ।

*Translation.*—The saptarṣi (the solstitial colure) lies with (along or near) the line, which joins the middle of (i. e. the point midway between)  $\alpha$  and  $\beta$  Ursa Majoris which are seen to rise first, in the east and the star ( $k$  Draconis) which is in the same declination circle with the former. This

<sup>38</sup> 1 (i) *Matsya Purāṇa* (Anandasrama edition, Ch. 274, Verse 42-44).

(ii) *Vāyu Purāṇa* (Anandasram edition. Ch. 99, Verse 421-424).

(iii) *Śrīmad-Bhāgavata* (Bangabasi edition, Sk. 12 Ch. 2, Verses 27-28).

line is the indicator of the Maghā-Saptarṣi (solstitial colure passing through Maghā and Saptarṣi). It appeared to be almost stationary in the time of Parikṣit for about 100 years.

The simple meaning of this extract is (1) that at some particular time, the solstitial colure passed through the point midway between  $\alpha$  and  $\beta$  Ursa Majoris, .

- (2) that the colure passed by  $k$  Draconis.
- (3) that when these are joined we get the indicator line for this colure (Maghā-Saptarṣi).
- (4) that this was the solstitial colure at the time of Parikṣit.
- (5) that the motion of the colure is so very small that it could hardly be perceptible before 100 years.

Of these, the point (1) alone, is capable of giving us the time of Parikṣit, which we shall presently use for the same purpose.

But before going into it, we may be permitted to take a passing notice of the misinterpretation of the passages done by the *Purāṇakāras* (the compilers or writers of the *Purāṇas* in their present form). They imagined and assumed

- (1) that the solstitial colures, in different ages, would always pass through the constellation Ursa Major.
- (2) that the solstitial colure would take only 100 years in crossing over each of the nakṣatras and,
- (3) that the motion of the solstice would be towards the east and not to the west.

But all these assumptions are wrong.

As regards historical information, the *Purāṇakāras* appear to be fairly correct; but they show, as we are constrained to say, a very miserable ignorance in matters Astronomical.



There is not the slightest hint or support in the passages quoted above, which might permit such wild assumptions to be formed. We have already seen that the astronomers of the time of Yudhiṣṭhira or of later dates were clear and definite as to the positions and the nature of the motion of the solstitial colure at different times.

The passages give a simple, correct and straightforward description of the colure and appear to have been the results of actual observation, made at the time. The authorship of the passages must go to some ancient eminent Astronomer and the Purāṇakāras only quoted him, without following the astronomical significance underlying the same. But we must say, we are really indebted to them for the preservation of this important information, the like of which is very rare to be met with.

Now, let us revert to our main theme. The point, midway between  $\alpha$  and  $\beta$  Ursa Majoris has been marked in the diagram as M. X is the pole of the ecliptic. Join XM and produce it to cut the ecliptic at the point T. If the longitude of the point T happened to be  $90^\circ$ , at any time, from the equinox of date, then the point T would mark the then northern solstice and the line X M T would then represent the then solstitial colure. According to the extract, this was the solstitial colure, at the time of Parikṣit. From the map, it will be seen, that  $\kappa$  Draconis, the then Polestar, the longitude of which was  $115^\circ 24'$  (499), was very close to it. To get the time of Parikṣit, we proceed as follow :—

Longitude of M (i. e. the point midway between $\alpha$ and $\beta$ Ursa Majoris)	.. $116^\circ 20'$ (499)
Longitude of M from equinox of date	.. $90 \quad 0$
Precession to 499 A. D.	.. $26 \quad 20$

Taking precessional rate  $49''.732$ , the interval between the time of Parikṣit and 499 A.D.

$$= \frac{26^\circ 20'}{49''.732} = 1906 \text{ years}$$

∴ The time of Parikṣit = 499-1906 = - 1407 A. D. = 1408 B. C. The year 1408 B. C. then comes out to be the time of Parikṣit. But remembering that the exact position of the solstice remains uncertain for about 50 years each way about the solstice according to the statement, in the extract quoted, we may take the time, as obtained above, as the approximate date of Pārikṣit.

Now, it remains to be seen if the solstitial colure, in the Parikṣit's time, passed through the nakṣatra Maghā.

The longitude of X M T or the solstitial colure =  $116^{\circ} 20'$  (499). The nakṣatra Maghā (of the system of 28 nakṣa.) extends from .. ..  $115^{\circ} 29'$  to  $128^{\circ} 20'$  the longitude of the colure falls between these limits. Hence, it passed through the nakṣatra Maghā as required.

Professor Sen Gupta has taken notice of the above extract and remarked as follows :—

“ The compiler of the Puraṇa wants to say that the solstitial colure passed through the middle point of the line joining  $\alpha$  and  $\beta$  Ursa Majoris at the time of Parkshit. According to the above interpretation, the time of Parikshit stands at the neighbourhood of 1,400 B. C. But according to the statements of the Puranas, the Saptarsi line passed not only through the middle point of  $\alpha$  and  $\beta$  Ursa Majoris, but it also passed through the middle point of the nakshatra Magha at the time of Parikshit.<sup>39</sup>”

Professor Sen Gupta admits that the date according to the text of the extract should be in the neighbourhood of 1400 B. C. and we have got it as 1408 B. C. He could not accept this date, for the reason that the colure mentioned above, did not pass through the middle point of the nakṣatra Maghā. But there is nothing in the extract which might suggest that the colure line passed exactly through the middle point of the nakṣatra Maghā. So the objection raised by Prof. Sen Gupta is groundless. It says

<sup>39</sup> *Ancient Indian Chronology*, p. 57.

simply that the line passed through the *nakṣatra* Maghā, without specifying any particular point in it. The line, in question, actually passed through the *nakṣatra* Maghā, as has been shown above, though not exactly through its middle point. It is possible that Professor Sen Gupta had in his mind the *nakṣatra* Maghā belonging to the system of 27 *nakṣatras*<sup>40</sup> which begins with the longitude 120° (499) and the middle point of which is very close to the *Star* Maghā, the longitude of which is 128° 58' (499) in that system. But it has already been established beyond doubt that the system used in the time of Yudhiṣṭhira or Parikṣit was of 28 *nakṣatras* and not of 27. Hence, the objection of Professor Sen Gupta does not hold, and our finding stands as correct.

The time of Bhārata war must be a few years earlier than that of the accession of Parikṣit. We have got the time of the Bhārata war as 1432-31 B. C. So, our date for the war is quite possible and as no other date has been found to be admissible, we have no other alternative than to accept this date as the correct date of the Bhārata war.

*Justification of taking the Star β Delphini as marking the first point of Dhaniṣṭhā*

The first point of Maghā, in the system of 28 *nakṣatras*, was behind the first point of Dhaniṣṭhā by 180°. So, when the southern solstice reached the first point of Dhaniṣṭhā the northern solstice was at the beginning of Maghā. In 1420 B. C. the longitude of northern solstice was at 116° 20' (499) and the colure then passed close to and a little to the east of  $\kappa$  Draconis, the north pole of this time. About 70 years later the northern solstice reached  $\kappa$  Draconis which was at the tail of the constellation *Śiśumāra*. It was exactly at this time, that the southern solstice reached the first point of Dhaniṣṭhā. The longitude of  $\kappa$  Draconis

<sup>40</sup> *Ancient Indian Chronology*, p. 57 last 3 lines, and p. 58 first 2 lines.

is  $115^{\circ} 24'$  (499). The first point of Dhaniṣṭhā must be in advance of this, by  $180^{\circ}$ , hence its longitude should be,  $295^{\circ} 24'$  (499). The longitude of  $\beta$  Delphini is  $295^{\circ} 29'$  (499). According to Mārkaṇḍeya's statement, the Dhaniṣṭhādi i. e. the first point of Dhaniṣṭhā was, at the time of Yudhiṣṭhira and later, considered to be the beginning of the sidereal sphere. When the southern solstice was at the first point of Dhaniṣṭhā, the northern solstice was at the first point of Maghā and the vernal equinox, at the first point of Kṛttikā (all of the new system). This time corresponds to about 1346 B. C. At this time, we have the stars  $\kappa$  Draconis ( $115^{\circ} 24'$ )<sup>41</sup> and  $\beta$  Delphini ( $295^{\circ} 29'$ )<sup>42</sup> marking respectively the northern and southern solstices of the time and either of them might have been taken, as the standard beginning. If we take the longitude of  $\kappa$  Draconis, (i. e.,  $115^{\circ} 24'$ ) to be the beginning of Maghā, then the beginning of Dhaniṣṭhā, would be  $295^{\circ} 24'$ . If we consider  $\beta$  Delpheni ( $295^{\circ} 29'$ ) to have marked the first point of Dhaniṣṭhā, then the first point of Maghā would be  $115^{\circ} 29'$ , that is, the first point of Maghā would then be in advance of  $\kappa$  Draconis by about  $5'$  only. To decide between these two, we take to the following reason.

In the group Dhaniṣṭhā, there are other stars much brighter than  $\beta$  Delphini. Such as,

Stars		Longitude	Latitude
$\delta$ Capricornus	..	$302^{\circ} 12'$	$-2^{\circ} 26'$
$\xi$ Aquarii	..	$303 \quad 12$	$+5 \quad 58$
$\kappa$ Capricornus		$296 \quad 6$	$-6 \quad 54$
where as			
$\beta$ Delphini	..	$295 \quad 29$	$+31 \quad 57$

In the *Sūryya-Siddhānta* and other Indian Astronomical works, we find that  $\beta$  Delphini has been universally re-

<sup>41</sup> and <sup>42</sup> These longitudes are referred to the equinox of 499 A.D.

cognised as the Yogatārā of Dhaniṣṭhā. In the above list, we find that  $\beta$  Delphini is very far from the ecliptic, but the other stars of the same nakṣatra are very close to it. The question may arise why  $\beta$  Delphini has been chosen as the Yagatārā in preference to all others nearer to the ecliptic. The only reason, that we can assign to it, is that  $\beta$  Delphini was so chosen as it marked exactly the first point of the nakṣatra Dhaniṣṭhā. The modern Indian Siddhāntas only followed this ancient tradition and accepted it as such. So, our decision goes in favour of  $\beta$  Delphini, to have marked the first point of Dhaniṣṭhā in the ancient time.

Therefore the longitude of the first point of Dhaniṣṭhā should be taken as  $295^{\circ} 29'$  (499) and not  $295^{\circ} 24'$  (499).

#### *Planetary positions during the Bhārata war*

Some of the scholars have dealt with the question of planetary positions, during the Bhārata war. All of them appear to be of opinion that the evidences, regarding the planets as recorded in the *Mahābhārata*, are full of contradictions and absurdities. Still they tried to utilise a few of them, which might tally with the actual positions in their respective years, with some show of coincidence. We do not propose to go into these at any length, but give, below, the positions of the planets on the first and the last days of the war only. They may be taken, as they are worth. They are as follows :

*Positions of planets at mean noon, on the meridian  
of Kurukṣetram (from vernal equinox of date)*

Planets	1st day of war			Last day of war	
	Longitude of Planets	Correspond- ing Nakṣatras	Long. of Planets	Corres. Nakṣatras	Remarks
Sun	201° 41' 50"	Jyeṣṭhā	219° 3' 18"	Pūrvāṣāḍha	All nakṣa- tras are of the new sys- tem, i. e. of 28 nakṣtras.
Moon	199 33 48	"	56 18 26	Punarvasu	
Mercury	199 9 15	"	227 55 26	Pūrvāṣāḍha	
Venus	221 22 53	Pūrvāṣāḍha	243 53 10	Abhijit	
Mars	90 22 43	Maghā	90 39 47	Maghā	
Jupiter	270 52 54	Dhaniṣṭhā	273 36 6	Dhaniṣṭhā	
Saturn	202 43 14	Jyeṣṭhā	204 43 4	Mūla	
Rahu	231 6 24	U. Āṣāḍha	230 12 23	P. Āṣāḍha	

Star Jyeṣṭhā 202° 15'

Star Dhaniṣṭhā 268 50 } According to the system

Nakṣatra Jyeṣṭhā from 191° 41' to 204° 33' } of 28 Nakṣatras.

It may be noted that we have also some approach to coincidence here with some references in the *Mahābhārata*, though we cannot attach much importance to them. They are given below :

रोहिणीं पीडयत्येवमुभौ च शशीभास्करो ।<sup>43</sup>

मघास्वंगारको वक्रः श्रवणे च बृहस्पतिः ॥<sup>44</sup>

*Translations.*—(1) The sun and the moon are afflicting the nakṣatra Rohiṇī or Jyeṣṭhā.

We have seen that the sun and the Moon were in the nakṣatra Jyeṣṭhā on the 1st day of the war. It has been shown in the table above.

(2) Retrograde Mars is in the constellation of Maghā and Jupiter is in Śravaṇā.

In Bhīsmaparva chapter 3.

<sup>43</sup> Verse 14.

<sup>44</sup> Verse 17.

In the table we find Mars to be in Maghā throughout the war. But it is not yet retrograde but will be so, very soon.

We find Jupiter in the table, at the beginning of the nakṣatra Dhaniṣṭhā, which it has just stepped in to from the nakṣatra Śravaṇā.

### *Bhārata Sāvitrī and its claim*

We had to refer to the *Bhārata Sāvitrī*, more than once. We propose here to discuss, if it has really any claim to be more authentic than the *Mahābhārata* itself.

The dates of events, relating to the Bhārata war, as given by *Bhārata Sāvitrī* are different from those, that are obtained from the statements of the most important personages, who took part in the Bhārata war. Some scholars prefer to base their respective times of the Bhārata war, on the views of the *Bhārata Sāvitrī*. It is therefore, considered necessary to see, if there is really any justification for doing so.

We get the mention of *Bhārata Sāvitrī* and its views, in the commentary of the *Mahābhārata* by Nīlakaṇṭha. Under chapter 17, Bhīṣma Parva, Nīlakaṇṭha gives the following account of the views of the *Bhārata Sāvitrī*—

कुसुपांडव-युद्धारम्भ—दिनं उक्तं भारत-सावित्र्यां-हेमन्ते प्रथमे मासि शुक्ल-पक्षे त्रयोदशीम् प्रवृत्तं भारतं युद्धं नक्षत्रे यमदैवते प्रथमे मार्गशीर्षे । अत्र त्रयोदशीशब्देन तद्युक्ता चतुर्दश्येव ग्राह्या । 'अर्जुनेन हतो भीष्मो माघमासे असिताष्टमी'ति 'त्रयोदश्यां तु मध्याह्ने भारद्वाजो निपातित' इति । तत्रैव युद्धस्य दशमे पंचदशे चान्हि हतयो भीष्म-द्रोणयोः अष्टमी-त्रयोदशी-संयोगदर्शनात् । अत्र पौषेणि माघशब्दः.....यत्तु अमावास्यायां दुर्योधनहननं तत्रैवोक्तं.....किंच 'चत्वारिंशदहान्यद्य द्वे च मे निःसृतस्य वै पुष्येण संप्रयातोस्मि श्रवणे पुनरागतः ।' इति युद्धारम्भात् अष्टादशेऽह्नि तीर्थयात्रातः आगतस्य बलदेवस्य वचनात् श्रवणे युद्धसमाप्तिः ।

The purport of the commentary is as follows:—

The war began on the day, which began with Śukla 13th and ended in Śukla 14th. It was in the first of the month of Hemanta, i. e., in the month of Mārga-

sirṣa. The nakṣatra was then Yamadaivata (Kṛttikā). Bhīṣma fell in the fight with Arjuna, on Kṛṣṇa 8th, in the lunar month of Pauṣa.

Droṇa was killed on the Kṛṣṇa 13th. Duryodhana was killed on amāvāsyā day, i. e. the last day, on which Baladeva returned from pilgrimage, when the nakṣatra was Śravaṇā.

We give below, the list of events, as obtained from the statements of Kṛṣṇa and Bhīṣma and corroborated by other persons, who took active part in the war, as obtained from the *Mahābhārata* along with those of the *Bhārata Sāvitrī*, as supplied by Nilakaṇṭha.

*Events in connection with Bhārata war*

Ser. nos.	Events	According to <i>Mahābhārata</i>	according to <i>Bhārata Sāvitrī</i>
1	Sun in Jyeṣṭhā	67 days before the southern solstice day.	80 days before the southern solstice day.
2	Beginning of battle	Amāvāsyā in Jyeṣṭhā 67 days before S. S. day.	Śukla 13th, in Kṛttikā 67 days before S. S. day.
3	Bhīṣma's fall	Śukla 10th, 58 days before S. S. day.	Kṛṣṇa 8th, 58 days before S. S. day.
4	Death of Droṇa	Pūrṇimā, 53 days before S. S. day.	Kṛṣṇa 13th, 53 days before S. S. day
5	Last day of war	Kṛṣṇa 43rd, Nakṣa. Punarvasu, Puṣya, 50 days before S. S. day	Amāvāsyā, Nakṣa. Śravaṇā 50 days before S. S. day
6	Bhīṣma's expiry..	Śukla 8th S. S. day	Kṛṣṇa 78th S. S. day.
7	Tithis, during war.	1st day, amāvāsyā 2nd to 16th, Śukla, 17th to 18th, Kṛṣṇa Pakṣa.	1st to 3rd day, Śukla Pakṣa 4th to 18th Kṛṣṇa Pakṣa.



The theory of the *Bhārata Sāvitrī*, is based on the assumption, that the solstitial colure, in the time of Yudhiṣṭhira, passed through the star Maghā. When this was the case, the southern solstice must have been at a distance of  $180^\circ$  from the star Maghā.

Longitude of star Jyeṣṭhā	..	228°	54' (499)
Longitude of star Maghā	..	128	58 (499)
Distance of star Maghā to star Jyeṣṭhā		99	56
“ “ “ southern sols.	..	180°	
“ “ “ Jyeṣṭhā to S. S.		80	4
i. e. about	..	80°	

Taking  $1^\circ$  approximately for the daily motion of the sun, he would take about 80 days in moving from Jyeṣṭhā to the southern solstice.

So, the statement, that in Yudhiṣṭhira's time, the northern solstice was at the star Maghā, becomes synonymous with the statement that at Yudniṣṭhira's time the sun took 80 days in moving from the star Jyeṣṭhā to the then southern solstice. The time, when the solstitial colure passed through Maghā, may be obtained as follows:—

Longitude of the star Maghā	..	128°	58' (499)
“ “ “ from Eqnx of date		90	
Pecession upto 499 A. D.	..	38	58

Taking precessional rate= $49''$  64, the interval to 499 A. D.=2826 years.

$$\begin{aligned} \text{The year when sols. colure passed through Maghā} &= \\ &= 499 - 2826 = -2327 \text{ A. D.} \\ &= 2328 \text{ B. C.} \end{aligned}$$

That this year (2328 B. C.), or any other year close to it cannot be the time of Yudhiṣṭhira has already been proved beyond doubt. The main reasons for this is summarised below :

(1) The statements of Bhīṣma and Kṛṣṇa give definitely the interval between, the amāvāsyā in Jyeṣṭhā and the then

southern solstice, as 67 days. This led us to the date of the Bhārata war as 1432-31 B. C. The solstitial colure then passed through a point about  $12^{\circ}$  to the west of the star Maghā.

- (2) Mārkaṇḍeya's statement fixes the date of the Bhārata war between limits 1589 B. C. and 1347 B. C.
- (3) *Atharva Veda*, which is the most ancient authority on the solstice in the nakṣatra Maghā, is definite about the colure not passing through star Maghā. We have seen that according to Mārkaṇḍeya, Abhijit was included in the system of nakṣatras in or after the year 1598 B.C. *Atharva Veda* gives the list of 28 nakṣatras including Abhijit. So, the list must have been composed by this time. At this time, the solstitial colure passed through a point about  $10^{\circ}$ , behind the star Maghā. It is likely that this point was intended by the author of the *Atharva Veda* when he said that अयनं मघा मे.
- (4) The statement about the Maghā-Saptarṣi line, based on actual observation, gives the position of the solstitial colure in the time of Parikṣit, the grandson of Arjuna, at about  $12\frac{1}{2}^{\circ}$  to the west of the star Maghā.

These are the conclusive evidences against the assumption, that solstitial colure passed through the star Maghā in the time of Yudhiṣṭhira. They also set aside the view that the sun took 80 days in moving from the star Jyeṣṭhā to the then southern solstice at that time. The assumption must therefore, be taken as utterly false and impossible in nature.

In order to adapt the above assumption, to dates of events, in connection with the Bhārata war, *Bhārata Sāvitrī* had to make more assumptions. It could

not reject the statements of Bhīṣma and Kṛṣṇa altogether, as they were too strong to be rejected. But it met them half way; it accepted the statement of Bhīṣma to the extent, that he (Bhīṣma) died on the southern solstice day, just 67 days after the beginning of the war and rejected the tithi on this day, which was Śukla 8th, (according to Bhīṣma). It accepted Kṛṣṇa that amāvāsyā fell in Jyeṣṭha, but he rejected that this was the 1st day of the war. By Jyeṣṭhā, Kṛṣṇa meant the *nakṣatra* Jyeṣṭhā; but *Bhārata Sāvitrī* took it as the *star* Jyeṣṭhā.

The splitting up of evidences into parts, and taking a part and rejecting the rest are not justifiable.

These false and faulty assumptions constitute the mainsupport to the theory of the *Bhārata Sāvitrī*, and on these whole of its structure rests. All its results are derived from these data as shown below.

According to *Bhārata Sāvitrī*, it was on amāvāsyā that the sun was in conjunction with star Jyeṣṭhā. But this day was 80 days before the southern solstice day. The war began, 67 days before the southern solstice day, *i. e.* just 13 days after this amāvāsyā day; hence, it must be the Śukla 13th. As the nakṣatra on the amāvāsyā day was Jyeṣṭhā, the nakṣatra on the first day of the war must, necessarily, fall in Kṛttikā. Kṛttikā being the 14th nakṣatra from Jyeṣṭhā in the system of 27 nakṣatras. The last day of the war was 31 days ahead of Jyeṣṭhā and the 31st nakṣatra ahead of Jyeṣṭhā is the nakṣatra Śravaṇā. The tithi on the 1st day of the war being Śukla 13th, the first 3 days of the war will naturally fall in the bright half and the remaining portion, in the dark half. These are exactly the results, which constitute the view of *Bhārata Sāvitrī*.

All these results or conclusions having been derived from false assumptions or premise are sure to be false and invalid.

Now, if we come across some such passages, in the *Mahābhārata*, as conform perfectly to the views of *Bhārata Sāvitrī*, we have no other alternative than to consider them as interpolation, willfully made to strengthen the case of *Bhārata Sāvitrī*. If some verses in the *Mahābhārata* are interpreted in such a way as to give results, just in agreement with the views of *Bhārata Sāvitrī*, they must be taken as misinterpretation. If we find, somewhere, that the texts are modified so as to give senses, just in accord with *Bhārata Sāvitrī*, we have to reject it as spurious. There are really such cases, in the *Mahābhārata* and in the interpretations of some of the supporters of *Bhārata Sāvitrī*.

People, who do not know that it was not possible for the solstitial colure in Yudhiṣṭhira's time to be at the star Maghā nor for the sun to take 80 days to pass from the star Jyeṣṭhā to the then southern solstice, may be apt to take the results of the *Bhārata Sāvitrī* (as arrived at from the false assumptions) as evidences, in support of the theory as advanced by *Bhārata Sāvitrī*; and in fact, many of the workers have followed the very same procedure and have thereby been misled.

We give, below, a few instances, which would show clearly how *Bhārata Sāvitrī* attempted to attain its ends.

To prove, that the tithi, on the first day of the war, was Śukla 13th, and not amāvāsyā, *Bhārata Sāvitrī* made use of the statement of Vyāsadeva, which appeared to be quite pliable for the purpose.

The statement of Vyāsadeva has been given and explained in pages 26-27. As we have to meet the arguments of *Bhārata Sāvitrī*, we may be permitted to quote it here again.

अलक्षः प्रभयाहीनः पौर्णमासीं च कार्तिकीम् ।  
चन्द्रोभूदग्निवर्णश्च पद्मवर्णो नभस्तले ॥

<sup>45</sup> Bhīṣma Parva, Ch. 2. Verse 23.

It is very clear and explicit. It was the result of an observation made by him, *in the full moon night*, just preceding the amāvāsyā, on which the war was to begin. The full moon occurred in the nakṣatra Kṛttikā. The aspect of the sky and the moon in that night, appeared to him as unnatural and ominous, foreboding awful calamity in the near future. The statement also supplied the information, that the lunar month of Kārttika was completed with the full moon, in the nakṣatra Kṛttikā, and that the lunar month of Mārgaśīrṣa began with the end of this full moon and would continue up to the next full moon, in the nakṣatra Mṛgaśīrā. Vyāsadeva's statement is perfectly consistent with that of Kṛṣṇa, regarding the next amāvāsyā in Jyeṣṭhā.

On the eve of the war Vyāsadeva seems to have spoken to Dhṛtarāṣṭra, of this full moon night, implying thereby that the outbreak of this terrible war, with the consequent destruction of human lives, was a forgone conclusion. There is nothing unusual in it. It may be noticed that there is not the remotest suggestion here to shew that Vyāsadeva made the observation, in the very night of the first day of the war and that the war began on the full moon night of Mārgaśīrṣa, or near about it.

If it could be shewn, by some means or other, that Vyāsa made the observation in question in the same night (i. e. in the night of the first day of the war), then it would clearly mean that he (Vyāsa) considered the war to have begun in the full moon night of Mārgaśīrṣa and not in the amāvāsyā according to Kṛṣṇa's statement. In that case the latter theory (as indicated by Kṛṣṇa's statement) would be completely demolished.

Again, this full moon follows the amāvāsyā in Jyeṣṭhā ; and so it would fall in the nakṣatra Mṛgaśīrā, (the lunar month then being Mārgaśīrṣa). According to Vyāsa's statement the moon was in Kṛttikā and this was possible

just 2 days before this full moon day, that is, on the tithi, Śukla 13th. And this Śukla 13th was exactly the tithi, on which, according to *Bhārata Sāvitrī*, the war began. If it now be assumed that Vyāsa was a bit inaccurate in his estimate of the tithi, then his statement would go fully in support of the theory of *Bhārata Sāvitrī*.

So, by the introduction of a slight change as to the time of observation in the text, the complete transformation of the sense would be effected resulting in the complete demolition of the standard theory and the full establishment of the new one simultaneously. This would be, as it were, killing of two birds with a single stone.

Professor Sen Gupta, a staunch follower and enthusiastic supporter of *Bhārata Sāvitrī*, supplies us with a version of Vyāsa's statement. It runs as follows :

आलक्षे प्रभयाहीनां पौर्णमासीं च कार्तिकीम् ।  
चन्द्रोभूदग्निवर्णश्च पद्मवर्णे नभस्तले ॥

The word, affecting the meaning of the text, is *Alakṣe* in this, in the place of *Alakṣaḥ*, in the common text, as given above by us. We have consulted all available sources, but nowhere could we find the version, given by Professor Sen Gupta. As he voices the theory of *Bhārata Sāvitrī*, we may take the new text to belong to *Bhārata Sāvitrī* itself.

*Alakṣe* is a verb in *Laṭ* (the present tense) and means "I see or I am seeing," whereas *Alakṣaḥ* is an adjective to the word *Candra* in the next line, meaning 'obscure or not quite discernible.'

We quote below, the translation and the remarks thereon by Prof. Sen Gupta :—

"But the battle did not actually begin with the new moon. For on the eve of the first day of the battle, Vyasa thus spoke to Dhritarastra :

"To night I find the full moon at the Kṛittikas (Pleiades) lustreless, the moon became of a fire-like colour in a lotus hued heaven."

“ If there be a new moon at the star Antares, the next full moon cannot be at the star group Pleiades. At the mean rate of motion, the moon takes exactly 12 days 23 hours or about 13 days, to pass from the Antares to Pleides . . . The moon was about 13 days old and not full. Vyasa, by looking at such a moon, thought the night, to be Purnamasi.”

This is the complete account of the reason (as the *Bhārata Sāvitṛī* wants us to believe) for taking Śukla 13th to be the first day of the war.

It may be noticed that in his attempt to attain his object, *Bhārata Sāvitṛī* reduced Vyāsadeva who is known to be the greatest sage of the time, to a mere dullard, not competent enough to distinguish between the moon of the thirteenth tithi and that of the full moon night or the month of Kārtika from the month of Mārgaśīrṣa.

All available sources have been consulted; everywhere the word *Alakṣaḥ* has been found to stand in the text. We have the word *Ālakṣe* in the only solitary quotation, as given by Prof. Sen Gūta. So the presumption is in the favour of the word *Alakṣaḥ*. The reading *Ālakṣe* seems to be incorrect.

The second lines, in both the texts, are identical. It may be noticed that the word “Abhūt” occurs there as verb to *Candra* (the moon). “Abhūt” is in *Lṅ* (past). It is used only in connection with an event happened some time ago. It should not be used for event occurring in the present. Hence, the second line, when interpreted would stand thus—

The moon *became* fire-coloured and lotus-hued in the *past*.

The second line is common in all the texts (including that of *Bhārata sāvitṛī*) and therefore, considered to be recognised universally.

The event, implied, in the first line of the text, forms part of the event, in the second line. Both the lines give the description of the one and the same event, as regards

time. As there is no question about the time (as expressed in the second line) i. e. the past, so there can be no question about the time that would be indicated by the 1st line as well. So the use of a word in the first line signifying an event occurring in the present, is not compatible with the past event, implied in the second. Hence, the word *Ālakṣe* in the first line, must be discarded as spurious. It must have been inserted only to mislead unsuspecting people.

This is a case of distortion ; but it served no purpose. This change was intended to show that the war began on the Śukla 13th and not on amāvāsyā. Had the war been really postponed to some other date than the amāvāsyā (as in Kṛṣṇa's statement), the fact must have been noted somewhere in the body of the *Mahābhārata*. At least Bhīṣma, who took part in the war, must have known of it; his statement is in complete agreement with Kṛṣṇa's statements ; for after 67 days of the war Bhīṣma still maintained that the war began on the amāvāsyā day for he gave the tithi on the day of his expiry as Śukla 8th. It is the direct consequence of the fact that the war began on the amāvāsyā day and not on the full moon day or on the Śukla 13th. Professor Sen Gupta dismissed the statement of Bhīṣma, by saying that it had only been a pious wish on the part of Bhīṣma, but not materialised<sup>46</sup>. But he did not adduce any evidence in support of this. As the date of Bhīṣma's expiry was long after the 1st day of the war, there cannot arise any question of "pious wish" and his statement has the value and force of deciding evidence as to the past event. So it proves completely and unmistakeably that the war began on the amāvāsyā day. Hence, it is certain, that Vyāsa could never say, that it began on the Pūrṇimā day and that the interpretation given to his statement (by *Bhārata Sāvitrī* or Prof. Sen Gupta) was certainly incorrect.

<sup>46</sup> *Ancient Indian Chronology*, p. 8.



Hence, it is proved beyond doubt that the author of the *Bhārata Sāvitrī* effected distortion in the text of Vyāsa-deva and thereby wanted to establish himself.

Baladeva's statement has been discussed before and is given here below again. It runs as follows :—

चत्वारिंशदहान्यद्य द्वे च मे निःसृतस्य वै ।

पुष्येण संप्रयातोऽस्मि श्रवणे पुनरागतः ॥

Our interpretation is : 42 days of my pilgrimage are completed with Puṣya ; for I went out in Śravaṇā ; I have now come back again.

Nilakaṇṭha gives the following interpretation of the same verse :—

This is the forty second day of my pilgrimage ; for I went out *in* Puṣya and have come back *in* Śravaṇā.

It may be noticed that the word puṣyeṇa is taken here to mean *in* Puṣya and not *with* Puṣya, as is implied by the 3rd case ending with Puṣya. Is it merely an oversight or intentional misinterpretation ?

It will be seen that this interpretation of Nilakaṇṭha supports *Bhārata Sāvitrī*. For according to *Bhārata Sāvitrī*, as we have already seen, the nakṣatra on the first day of the war was Kṛttikā. Baladeva returned on the last day of the battle i. e. after 17 days from the first day. If we take the moon to have crossed over 18 nakṣatras in 17 days then the nakṣatra on the last day would come to the Uttarāṣāḍha, just one nakṣatra behind Śravaṇā. But making allowance for the unequal motion of the moon, it might be possible for the moon to reach Śravaṇā on that day. Again, Puṣya is the 8th nakṣatra from Aświnī (being taken as the first). If Baladeva had started in Puṣya, then on the 42<sup>nd</sup> day from start, the nakṣatra might be  $8+41=49$ th or (49-27) th or 22nd from Aświnī. So it is then Śravaṇā. It may be put in the other way ; according to Baladeva's statement the nakṣatra on the 18th or the last

day of the war was Śravaṇā, therefore, the nakṣatra on the first day of the war must be Kṛttikā, just supporting *Bhārata Sāvitrī* and contradicting Kṛṣṇa's statement which said that the nakṣatra on the first day of the war was Jyeṣṭhā.

It is through Nilakaṇṭha, that *Bhārat Sāvitrī* was brought to light. About the learning of Nilakaṇṭha there is no question. But he was a strong supporter to the claims of *Bhārata Sāvitrī*; so there seems to be just a probability of his misinterpreting the text, knowing it quite well that this interpretation was wrong. For, it was based on the wrong assumption that Jyeṣṭhā was at a distance of 80° from the southern solstice as has been fully established before.

Or, it might be possible, that the author of *Bhārata Sāvitrī* was responsible for this misrepresentation and misinterpretation. Nilakaṇṭha only followed him and accepted him as authority, in the matter of dates and other particulars, in connection with the Bhārata war.

From the above discussions we come to the following conclusions :

- (1) (a) The claim of *Bhārata Sāvitrī* has nothing to stand on. It is based on the false and impossible assumption that the northern solstice was at the *star* Maghā in Yudhiṣṭhira's time.
- (b) The author of *Bhārata Sāvitrī* took to distortion and wilful misrepresentation of facts to create new evidences to make up for the defect and thereby to attain his objects. The game is so transparent that it cannot escape the eye of scrutiny. Therefore it must be rejected.
- (2) (a) The evidences in the *Mahābhārata* give the correct date for the time of the Bhārata war.
- (b) The first day of the war really fell on amāvāsyā in which the sun was in conjunction with Jyeṣṭhā.

- (c) Bhīṣma died just after 67 days of the first day of the war.
- (d) The day on which Bhīṣma died was the southern solstice day and it was the Śukla eighth.
- (e) The bright fortnight extended from the day of the war to the 16th day, the last two days having been in the dark half.

If now, we come across any statements in the *Mahā-bhārata* which seem to go against the above conclusions, we would have no other choice than to discard the same as spurious. Let us examine some such passages as given below :—

अर्वं रात्रिः समाजज्ञे निद्रान्धानां विशेषतः ।  
 सर्वे ह्यासन्निस्तुहाः क्षत्रिया दीनचेतसः ॥  
 ततो विनिद्रा विश्रान्ताश्चन्द्रमस्युदिते पुनः ।  
 संसाधयिष्यथान्योन्यं संग्रामं कुरुषांडवाः ॥  
 यथा चन्द्रोदयोद्भूतः क्षुभितः सागरोभवत् ।  
 यथा चन्द्रोदयोद्भूतः स बभूव नलार्णवः ॥  
 ततः प्रवृत्ते युद्धं पुनरेव विशाम्पते ।  
 लोके लोकविनाशाय परलोकमभीप्सताम् ॥<sup>47</sup>

The passages refer to the battle of the 14th day, at the sunset and the midnight <sup>of</sup> which, Jayadratha and Ghatotkaca were respectively killed. The purport of the verses is that the soldiers got very tired at midnight and fell asleep. They got up again refreshed, when the moon rose before dawn and resumed the fight.

The astronomical significance of the passages is that the night in question, was one of Kṛṣṇa Pakṣa or the Dark fortnight. But, according to the data of the *Mahābhārata*, the validity of which has been proved beyond doubt, the war began on the amāvāsyā day. Hence, the bright half continued up to the 16th day of the war; during this

period and also in the last two <sup>days</sup> years there was no possibility of the moon to rise in the morning. But in accordance with the views of the *Bhārata Sāvitṛī* (which have been shown to be erroneous and groundless), the dark fortnight began from the 3rd day of the war and continued nearly to the end. We discern here clearly the hand of the author of the *Bhārata Sāvitṛī* or some of his followers who inserted these verses in the body of the *Mahābhārata*, to make the theory of the *Bhārata Sāvitṛī* stronger.

These and similar passages therefore, must have to be taken as spurious and must be rejected accordingly.

### SUMMARY

#### P. 1. Introduction.

Pp. 1-16. Review of contemporary workers. It has been shown that these workers derived their respective dates of the Bhārata war from different extraneous sources and not from the evidences given in the *Mahābhārata*. They made use of the *Mahābhārata* evidences only to establish their dates; in doing so they had occasion to modify the *Mahābhārata* statements in some cases and to misinterpret them in some others.

Pp. 16-33. Preliminary steps to Determination of date of Bhārata war. We scrupulously followed the *Mahābhārata* evidences only and tried to determine the date of the Bhārata war therefrom. We began at first with provisional assumption that the sun was at the star Jyēṣṭhā in Amāvāsyā (on the first day of the war) and obtained its date as 1432-31 B. C.

Pp. 34-42. Limits to the Date of Bhārata war. We got the limits to the time of Yudhiṣṭhira as 1589 B. C. and 1347 B. C. from Mārkaṇḍeya's statement.

Pp. 42-49. All possible years between these limits have been tested. The YEAR 1432-31 B. C. was found to agree with the calendar for the year of the Bhārata war in all respects and hence was accepted as the CORRECT DATE OF THE BHĀRATA WAR.

Pp. 49-56 Maghā Saptarṣi (solstitial colure) in the time of Parikṣit was discussed and the corresponding time was found to be about 1408 B. C.

- Pp. 56-58 Justification for taking  $\beta$  Delphini to be the first point of the nakṣatra Dhaniṣṭhā was discussed.
- Pp. 58-60 Planetary positions, for the first and the last day of the Bhārata war, have been given.
- Pp. 60-73 The claim of *Bhārata Sāvitrī* has been criticised. Its theory has been found to be based on the false assumption that at the time of Yudhiṣṭhira, the northern solstice was at the star Maghā. The author of *Bhārata Sāvitrī* seems to be responsible for many interpolations in the *Mahābhārata*.

## APPENDIX A

Table of Distances from O (zero Dhaniṣṭhā) to the Beginning and End of nakṣatras of the Old and New systems.

Old System (27) Nakṣatras				New System (28 Nakṣatras)			
Ser. No.	Nakṣatras	Beginning	End.	Ser. No	Nakṣatras	Beginning	End.
1	Dhaniṣṭhā	0 0	13 20	1	Dhaniṣṭhā	0 0	12 51
2	Śatabhiṣā	13 20	26 40	2	Śatabhiṣā	12 51	25 43
3	P. Bh. Pada	26 40	40 0	3	P. Bh. Pada	25 43	38 34
4	U. Bh. Pada	40 0	53 20	4	U. Bh. Pada	38 34	51 26
5	Revati	53 20	66 40	5	Revati	51 26	64 17
6	Āświnī	66 40	80 0	6	Āświnī	64 17	77 9
6½	½ of Bharanī		90 0				
7	Bharanī	80 0	93 20	7	Bharanī	77 9	90 0
8	Kṛttikā	93 20	106 40	8	Kṛttikā	90 0	102 51
9	Rohiṇī	106 40	120 0	9	Rohiṇī	102 51	115 43
10	Mṛgaśīrā	120 0	133 20	10	Mṛgaśīrā	115 43	128 34
11	Ārdrā	133 20	146 40	11	Ārdrā	128 34	141 26
12	Punarvasu	146 40	160 0	12	Punarvasu	141 26	154 17
13	Puṣya	160 0	173 20	13	Puṣya	154 17	167 9
13½	½ of Āśleṣā		180 0				
14	Āśleṣā	173 20	186 40	14	Āśleṣā	167 9	180 0
15	Maghā	186 40	200 0	15	Maghā	180 0	199 51
16	P. Phālgunī	200 0	213 20	16	P. Phālgunī	192 51	205 43
17	U. Phālgunī	213 20	226 40	17	U. Phālgunī	205 43	218 34
18	Hasta	226 40	240 00	18	Hasta	218 34	231 26
19	Citrā	240 0	253 20	19	Citrā	231 26	244 17
20	Swāti	253 20	266 40	20	Swāti	244 17	257 9
20½	½ of Viśākhā		270 0				
21	Viśākhā	266 40	280 0	21	Viśākhā	257 9	270 0
22	Anurādhā	280 0	293 2	22	Anurādhā	270 0	282 51
23	Jyeṣṭhā	293 20	306 40	23	Jyeṣṭhā	282 51	295 43
24	Mūla	306 40	320 0	24	Mūla	295 43	308 34
25	P. Āṣāḍha	320 0	333 20	25	P. Āṣāḍha	308 34	321 26
26	U. Āṣāḍha	333 20	345 40	26	U. Āṣāḍha	321 26	334 17
				27	Abhijit	334 17	347 9
27	Śravaṇā	346 40	360 0	28	Śravaṇā	347 9	360 0

## APPENDIX B

Table of Distances of the beginning and the end of nakṣatras  
from the equinox of 499 A. D.

Old system (27 nakṣatras)				New system (28 Nakṣatras)			
Ser. No.	Nakṣatras	Begin-ning	End.	Ser. No.	Nakṣatras	Begin-ning	End.
1	Dhanīṣṭhā	295 29	308 49	1	Dhanīṣṭhā	295 29	308 20
2	Śatabhiṣā	308 49	322 9	2	Śatabhiṣā	308 20	321 12
3	P. Bh. Pada	322 9	335 29	3	P. Bh. Pada	321 12	334 3
4	U. Bh. Pada	335 29	348 49	4	U. Bh. Pada	334 3	346 55
5	Revatī	348 49	2 9	5	Revatī	346 55	359 46
6	Aświnī	2 9	15 29	5	Aświnī	359 46	12 38
6½	½ of Bharanī		25 29				
7	Bharanī	25 29	28 49	7	Bharanī	12 38	25 29
8	Kṛttikā	28 49	42 9	8	Kṛttikā	25 29	38 20
9	Rohiṇī	42 9	55 29	9	Rohiṇī	38 20	51 12
10	Mṛgaśīrā	55 29	68 49	10	Mṛgaśīrā	51 12	64 3
11	Ārdrā	68 49	82 9	11	Ārdrā	63 3	76 55
12	Punarvasu	82 9	95 29	12	Punarvasu	76 55	89 46
13	Puṣya	95 29	108 49	13	Puṣya	89 46	102 38
13½	½ of Aśleṣā		115 29				
14	Aśleṣā	108 49	122 9	14	Aśleṣā	103 38	115 29
15	Maghā	122 9	135 29	15	Maghā	115 29	128 20
16	P. Phālgunī	135 29	148 49	16	P. Phālgunī	128 20	141 12
17	U. Phālgunī	148 49	162 9	17	U. Phālgunī	141 12	154 3
18	Hasta	162 9	175 29	18	Hasta	154 3	166 55
19	Citrā	175 29	188 49	19	Citrā	166 55	179 46
20	Swāti	188 49	202 9	20	Swāti	179 46	192 38
20½	½ of Viśākhā		205 9				
21	Viśākhā	202 9	215 29	21	Viśākhā	192 38	205 29
22	Anurādhā	215 29	228 49	22	Anurādhā	205 29	218 20
23	Jyeṣṭhā	228 49	242 9	23	Jyeṣṭhā	218 20	231 12
24	Mūla	242 9	255 29	24	Mūla	231 12	244 3
25	P. Āṣāḍha	255 29	268 49	25	P. Āṣāḍha	244 3	256 55
26	U. Āṣāḍha	268 49	282 9	26	U. Āṣāḍha	256 55	269 46
				27	Abhijit	269 46	282 38
27	Śravaṇā	282 9	295 29	28	Śravaṇā	282 38	295 29

# A NOTE ON SCULPTURES AT LAKHAMANDAL

BY

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There are some important sculptures of Hindu gods and goddesses at Lakhamandal, a place of great antiquity on the Jumna in the Chakrata Tahsil of the Dehra Dun district. It is situated at a distance of 24 miles almost due east of Chakrata and can be covered on foot in 2 days. The sculptures are assembled at two places, firstly built into the side walls and also placed on the floor of the *antarāla* and of the sanctum of the Lākheśvara temple, and secondly collected in the closed shed built for the purpose by the Archaeological Department.

The present *antarāla* of the temple, which is a later addition to the Lākheśvara shrine, contains the following images :—

*South Wall*—In the first row is a Saptamātrikā panel (length 4' – 1½" × ht. 1' – 0") depicting the Seven Divine Mothers, Brahmāṇī on full-blown lotus, Māheśvarī on bull, Vaishṇavī on Garuḍa who has a human face and two out-spread wings, Kaumarī on peacock, Vārāhī on a prostrate human figure, Indrāṇī holding Vajra and seated on elephant, and Chāmuṇḍā on a Preta. The lotus in place of *haṁsa* in the case of Brahmāṇī and the human figure as the *āsana* of Vārāhī are remarkable features.

In the second row is also a Saptamātrikā relief (3' – 4" × 10½") with Vīrabhadra on right and Gaṇapati on left, followed by two more sculptures, viz., one showing a standing male figure (ht. 1' – 10" × 11½") with a bull behind him, and the other a figure of six-armed Mahishāsura-



mardini. The figure in the second image is two-armed with a bunch of flowers in the left and a club in the right hand (now mutilated). He wears a *kirīṭa mukuṭa*, pearl ear-rings, *ekāvalī* pearl necklace, armlets and wristlets. The hair loosely fall in frizzles and a scarf is worn on the arms. A short *dhoti* is secured by a *mekhalā* knotted in front with a loop over a floral pattern from which depends an elegant chain going round like festoons, which shows the tassel ends falling on both knees. The figure is well-finished and gracefully posed; it reveals the post-Gupta style and may be assigned to the early 8th century A.D.

In the third row are five smaller images including two Kārttikeya figures, one Saptamātrikā relief and two Hara-Gaurī images. The first Kārttikeya image (1' – 3" × 10") is of interest as besides the peacock vehicle in the centre are shown two more peacocks one at each end looking towards the god. The second four-armed figure of this deity has six heads arranged in a double row of three each, but is of a very late date. In the north wall of the *antarāla* are small statuettes showing Hara-Gaurī, standing Viṣṇu, a female goddess probably Durgā, Lakshmī-Nārāyaṇa, and a big rounded stela showing Śiva-Pārvatī seated in ālingana-mudrā (ht. 3' – 0 × 1' – 10"). Amongst loose sculptures placed on the floor two are noteworthy, one representing Śiva-Pārvatī (ht. 3' – 2" × 2' – 2") seated on Kailāśa and the other showing squatting Kubera with three treasure vases. Both the images are of considerable artistic interest and may be dated to the early medieval period. (Circa 8th century A.D.) Inside the sanctum of the Lakhesvara temple is a Śiva liṅga in worship. About two dozen sculptures of the late medieval period are placed along the walls comprising 5 images of Hara-Gaurī, 4 of standing Sūrya, 3 of Durgā, 1 of Pārvatī performing penance, 1 of Śiva as Lakulīśa, 1 of Nāga, 2 of Viṣṇu and a few others. An image of Sūrya placed along the central wall is prominent (3' – 0 × 2' – 0). It shows the





Fig. 1—Standing Dvārapāla locally described as Pāṇḍava Bhīma.  
Lakha Mandal, Dehra Dun.

god holding lotuses in both hands wearing boots and attended by Aruṇa and the smaller figures of Daṇḍa & Piṅgala.

The wooden porch in front of the temple is remarkable for some good carvings of a symbolical nature and has two Nandi bulls (length 4' - 3"; 3' - 3") placed in front which are made of the same fine black stone in which are carved the two Dvārapāla images of Jaya and Vijaya in front of the larger Liṅga shrine in the northern part of the compound. These Dvārapāla figures are two-armed, each holding a mace in his outer hand while the inner hand is placed on the thigh (Fig. 1). Each wears fine jewelled mukuṭa, ekāvalī pearl necklace with a central elongated bead, short *jaṅghikās* or loin-clothes secured by a girdle, their busts being extremely well-done both as regards finish and polish. On stylistic grounds these figures may be assigned to the Gupta period (Circa 5th century A.D.). The two Nandi bulls and the bigger Śiva liṅga (girth 6' - 8½"; ht. above floor 2'), which was re-installed at some later date in its present position in the northern part of the compound, probably belong to the early medieval period.

Of the three exterior niches (Sanskrit रश्मिः ) of the Tākheśvara temple, the north one contains an image रश्मिः of Mahishāsurmardinī in its original position; the niche on the west is occupied by a small relief (ht. 1' - 7") showing two female figures, with two attendant parasol-bearers, the right one on lotus being Lakshmī and the left one on *makara* being Gaṅgā. The third niche on the south side is now empty.

The niches were surmounted by a *chaitya* window or *torāṇa* ornament containing an image of Kārttikeya on south, Gaṇapati on west and Kubera on north.

In the sculpture shed built by the Archaeological Department are collected about 70 sculptures. These have now been arranged and classified by Mr. M. S. Vats, Superintendent, Archaeological Survey, Northern Circle, Agra. Almost all the images appertain to the Śaiva pan-

theon and most of the beautiful architectural pieces belonged to the Śaiva temple built at Lakhamandal by the Princess Íśvarā whose inscription incised on a black-basalt slab is preserved in this collection (Ep. Indica, Vol. I, pp. 11-15). The sculptures roughly belong to three different periods, viz., (1) Circa 8th century, that is, of the time of the Princess Íśvarā, (2) late medieval period or Circa 12th century and (3) post medieval period, *i.e.*, about the 16th century or later.

Amongst images of the first period the following five are of much artistic value :

1. Image of Śiva-Pārvatī (ht. 3' - 7" × 1' - 10") showing four-armed Śiva standing with his consort Pārvatī against Nandī bull whose regardant head is turned towards the divine couple in rapt attention (Fig. 2). Śiva is playing on Vīṇā with his two upper hands, the remaining right hand is holding a trident(?) and the corresponding left hand touches the left breast of Pārvatī who is holding a garland in her hand near the thigh. Śiva has *jaṭājūṭa* on the head with some locks falling on right shoulder and is wearing a necklace, a pearl ear-ring in the right ear and a big discular ring in the left, armlets and wristlets, and lastly a beaded girdle with the *ūrdhva retas* feature marked on it. Pārvatī is also elegantly dressed, wearing a bodice and a *sārī*, a pearl ear-ring, an *ekāvalī* necklace, bracelets, a girdle and anklets round the feet. The sculpture, although somewhat weathered, shows much artistic quality being marked by deep harmony and an expression of inward joy. Circa 8th century A.D.

2. Bas-relief showing Śiva-Pārvatī (ht. 3' - 0 × 2' - 1") seated on Kailāśa with Nandī bull, standing Gaṇeśa on right, Kārttikeya on left and a Śiva gaṇa in *añjali-mudrā* in the centre (Fig. 4). Śiva holds a trident and a *mātuluṅga* fruit in his right hands, a snake in the lower left, while his upper left hand embraces Pārvatī at her breast. The divine couple is shown experiencing ecstatic





Fig.2—Virabhadra or Śiva with his Śakti. Lakha Mandal, Dehra Dun.

pleasure in their abode on Kailāśa. Circa 8th century A.D.

3. Bas-relief ( $3' - 2'' \times 2' - 4''$ ) showing Śiva in his Tripurāntaka form. Śiva stands in *pratyālīḍha* posture and is piercing the demon Tripura poised in the sky with his trident held in two hands (Fig. 3). Two other hands hold aloft the canopy of elephant skin. Of the remaining right hands one holds the *paraśu* and the other is held in *abhaya mudrā*. Pārvatī is seated on a low seat in front of Śiva. The god is touching her at the chin in the act of reassuring her. She is holding her son Kārttikeya, standing by her side, as if to afford him protection from fear caused by commotion in this great drama.

Tripura seems to be depicted in his triple form, once being trampled under the left foot of Śiva, the middle one in the *antariksha* region is haggard and shown standing helplessly with a dagger in right hand, while the topmost form afloat in the sky is being pierced by Śiva's trident. Near the right foot of the god stands a *gaṇa* in the attitude of adoration, while the tall form of the deity majestically fills and dominates the whole scene. His matted locks stand erect on head and are secured at the lower edge by a fillet consisting of skull-bosses. He wears a long skull-garland (*kapālamālā*) and a *nāga-yajñopavīta*. (Circa, 8th century A.D.). There are two other reliefs showing Śiva killing the demon Tripura but they are not so well preserved.

4-5. Bas-reliefs ( $2' - 2'' \times 1' - 10\frac{1}{2}''$ ;  $2' - 7'' \times 1' - 7\frac{1}{2}''$ ) showing god Śaṅkara in his *tāṇḍava* dance. The eight-armed figure of Śiva holds a canopy of elephant skin on the head with two hands; of the remaining three right hands one plays the *ḍamaru*, another touches the chin of Pārvatī seated on his proper right and playing on a *vīṇā*, while the third one is shown in the *gaja-hasta* pose. The corresponding left hands are held in *abhaya-mudrā*, grasping the trident and placed at the hip. An attendant *gaṇa* is seated at the left corner with a pair of upright drums



in front. In the second bas-relief Pārvatī is seated in the lower left corner. The sculptures are expressive of movement combined with serenity. They may be dated to about the 8th-9th century and are reminiscent of the best traditions of Ellora art.

There are five other images showing Śiva-Pārvatī seated side by side in the usual *ālīṅgana* attitude. These may be assigned to about the 12th century A.D.

An image of Pārvatī (No. 14, ht.  $2' - 2'' \times 1' - 1''$ ) showing the goddess in the act of performing penance is also worthy of attention. Pārvatī has a female attendant on either side, her right foot is placed on a lion and the left one on the back of the bull. The goddess is standing in the midst of four burning fire altars and holds a book in her left lower hand, the other attributes being lost. A Śiva-linga is carved in the right upper corner. Pārvatī wears simple dress and the image may be assigned to the same period as the foregoing sculpture of Śiva-tāṇḍava, i.e., about the 8-9th century A.D.

There is also a statuette of Durgā on lion and three images of the goddess Mahishāsuramardīnī (Nos. 16-17-18), one of which with a rounded top ( $2' - 5'' \times 1' - 5\frac{1}{2}''$ ) may belong to about the 9th century A.D.

There is also a beautiful image of Kubera (No. 22;  $1' - 2'' \times 1' - 6''$ ) squatting with three treasure vases arranged in a row in front of him and wearing curly hair and also having a scarf tied round his belly. Date circa 8th century A.D.

A couple of Gaṇapati images (Nos. 20, 21; ht.  $1' - 8'' \times 1' - 3\frac{1}{2}''$ ) date from about the 12th century and a bas-relief ( $1' - 0'' \times 1' - 2''$ ) showing four-armed Viṣṇu sleeping on Śeṣha dates from about the 16th century A.D.

A prominent lintel (No. 24; length  $5' - 4''$ ,  $1' - 4''$ ) showing the Saptamātrikās with four-armed Vīrabhadra on bull at proper right and Gaṇapati on left is also noteworthy as Vīrabhadra, Maheśvarī and Chāmūṇḍā alone



Fig. 3.—Śiva piercing the Demon Tripura. Lakha Mandal, Dehra Dun.



have four hands each, the others having only two hands. Circa 12th century A.D.

About half a dozen Śiva lingams of various sizes have also been collected in the museum shed. There are also about thirtysix architectural pieces, some of good merit, consisting of door-jambs and temple pediments carved with the chaitya-window enclosing the Trimūrti form of Śiva heads, this motif being a very common feature of Śaiva temples all over the hills of northern India. One sculpture (No. 37), length 8' - 8", height 2' - 4" consisting of three pieces is exceptionally good, the Trimūrti form shown in its circular sunk panel on the central piece being very dignified. On the side pieces adorned with beaded borders are carved *haṁsas* with conventionalised features. This as also a somewhat smaller pediment, (No. 36) in one piece only (5' - 6½" × 2' - 4") may be dated to about the 8th century A.D., and must have formed part of the impressive façade of the monumental Śiva temple built under the patronage of Princess Išvarā. Many other pieces of pediments showing either the Trimūrti heads or a single head are also preserved and reveal varying degrees of artistic merit.

An architectural piece carved in the form of a doorway (1' - 1" × 1' - 7") with central slit to accommodate a miniature shrine is carved on the jambs with two vertical bands, the inner one showing a foliated scroll and the outer one the Dvārapālas along the lower edges, Kārtikeya on proper right and Gaṇapati eating sweet balls on left are shown in the upper corners. Above the lintel is a Śiva head with three eyes. This piece possesses considerable merit and must date from the post-Gupta period.

### INSCRIPTIONS

- A. 1. Inscribed slab (2' - 10½" × 1' - 9") bearing 14 lines of writing known as the Lakhamandal Praśasti, recording the dedication of a Śiva temple by Išvarā, wife of (Chandragupta, prince of Jālandhara (*Ep. Ind.*, I, pp. 11-15).
- A. 2. Inscribed slab (1' - 10" × 1' - 5½") bearing the epigraph in a sunken panel. The writing originally consisted of

about 20 lines in Gupta script of which not more than one-fourth is now indifferently preserved. (Edited and published elsewhere in this number.)

- A. 3. An irregular slab ( $1' - 11\frac{1}{2}'' \times 1' - 6''$ ) inscribed with several irregular lines of writing in Śaṅkhalipi of the Gupta Period.
- A. 4. Left hand piece of a rectangular inscribed stone slab (ht.  $5'' \times 8''$ ) containing traces of 5 lines of writing in Gupta script. Removed from the Lākheśvara temple to the museum shed.
- A. 5. An irregular slab ( $2' - 3'' \times 1' - 4\frac{1}{2}''$ ) bearing a Devanāgarī inscription in six lines dated in Vikrama Samvat 1954.



Fig. 4.—Śiva and Pārvatī with Gaṇeśa and Kārttikeya.  
Lakha Mandal, Dehra Dun.



## Ancient Indian Ornithologists

By V. S. Agrawala

Some interesting side light is available about interest in bird life amongst ancient Indians from an old reference in the Satapatha Brahmana XIII. 4.3.13. It is stated there that at the end of the Rajasuya ceremony and as a part of it an intellectual gathering was convened which remained in session for about ten days and in which experts in different branches participated to introduce the newly consecrated ruler to important branches of life and national wealth. The whole gathering was known as the Pariplava Akhyana (परिप्लव आख्यान). The Hota priest called upon the Adhvaryu priest to expound the creatures or the subjects to the King. On the ninth day of the ceremony it is stated that bird experts and birds were brought to the gathering and those experts acquainted the ruler with the bird life of the Kingdom. After all, the King is the guardian and protector of all life and it is his duty to ensure measures of safety and growth for the Avifauna of his realm. The bird specialists are referred to as Vayo-vidyikas. According to a later grammatical rule approved by Katyayana and Patanjali, a Vayasa-vidyika (same as वायो विद्विक्) is one who either studies or is an expert in the knowledge of birds (IV. 2.60).

Systemetic work on Indian bird names and on bird-lore in ancient India has to be done. Specially rich and extensive lists of bird names are available in the Vedic Index of Macdonell and Keith (which summarizes the Vedic evidence on the point), the inscriptions of Priyadarsi Asoka who out of his great compassion towards all creatures granted special protection to enlisted species of birds, and in the medical works of Charaka and Susruta. In the Sanskrit Dictionary of Monier Williams, the Pali Dictionary of Stede and the Jain Prakrit Dictionary of Seth Hargovind thousands of ancient Indian bird names and synonyms are recorded which have to be properly evaluated. India is an exceptionally rich country in the number of its winged sons and daughters of the heaven. Scientists estimate about 2,500 species visiting the Indian sub-continent. The ancients conceived of सुपर्णा (mother of Suparna, the great eagle) as one of the wives of the creator.



Modern India requires the services of many distinguished ornithologists, the new descendants of the old Vayo-vidyikas who will consider it their pride and duty to present to the nation its wealth of Avi-fauna in well arranged and well labelled Natural History galleries for the public. It is worth mentioning that India is still very lucky in her regard for the sanctity of bird life. As that brilliant observer Aldous Huxley has remarked in his *Jesting Pilate* :

'The really odd unexpected thing about Bombay was its birds. There are more birds in this million-peopled city than in an English woodland. Huge kites, their wings spread and unmoving, go soaring along the thoroughfares, effortlessly keeping pace with the traffic below. Innumerable grey-headed crows fly hither and thither, sit perched on every roof, every sill and wire. Their cowing is the fundamental bass to every other sound in Bombay. No body, in this land where killing of animals is all but murder, does them or their nests any harm. They increase and multiply, they are astonishingly unafraid. All over India we were to find the same abundance of bird life, the same trustful absence of fear. Coming from Italy, where, for nine months of the year, while *lo sporto* is in progress, the countryside is almost birdless, where armed men lie ambushed half a day for a hedge-sparrow, and migrant warblers are netted and eaten by the thousand-coming from Italy, I was particularly impressed by the number and variety of Indian birds' (p. 7).

# Geological Time Scale & Geological Formations of India

## I—Cainozoic Era (Modern Life)

(55 Million years

Age of Mammals, toothless birds and flowering plants).

Indian names

अभिनवजन्तुक युग

(from *kainos* or *cenos* recent, and *zoo* life.)

### Quaternary

Recent

...

Modern river deposits in the *khadar* of the Indus and the Ganges.

दुरीयक

(from L. *quatuor*, four—सं० दुरीय)

Pleistocene or Glacial

Glacial moraines;

Upper *karewas* of Kashmir; Indo-Gangetic Alluvium.

हिमकालिक or अर्वाकृतमकालिक  
(*pleistos*, most *kainos* recent.)

### Tertiary

तृतीयक (from L. *tertius*, third.)

Pliocene	...	Laterite (high-level) of the Peninsula; Siwalik system.	अर्वाकृत काल (from Gr. <i>pleion</i> more and <i>kainos</i> , recent.)
Upper Miocene	...	Middle Siwalik	ईषदर्वाक काल (from <i>meion</i> , less, <i>kainos</i> , recent.)
Middle Miocene	...	Lower Siwalik (Nahan)	Upper—अन्त्य, उपरला
Lower Miocene	...	Upper Murre Series: Kasauli Series of Simla; Mekran system of Sind Cuddalore Series	Middle—मध्य, बिचला Lower—आद्य, निचला
Oligocene	...	<i>Nari</i> Series of Cutch; <i>Dwarka</i> beds of Kathiawar; <i>Nari</i> Series of Sind	अर्वाक काल ( <i>Oligos</i> , little, and <i>kainos</i> , recent.)
Eocene...	....	....	न्युष्ट-अर्वाक काल, सद्यस्काल (from <i>eos</i> , dawn, and <i>kainos</i> , recent.)

Upper ...	... Subathu Series of Outer Himalayas. <i>Karhar</i> Series		
Lower ...	... <i>Laki</i> series of Bikaner, Kohat, Assam, Sind and Baluchistan. (First appearance of the familiar forms of existing life.)		
	II—Mesozoic Era (Medieval Life)—Age of Reptiles, Dinosaurs (सरीसृप, दानवसरट युग). (Duration 135 Million years Began 190 Million years ago)	मध्यजन्तुक युग (from <i>mesos</i> , middle.) Dinosaurs—दानवसरट Cretaceous—खटिकात्मक काल (from <i>creta</i> , chalk.)	
Cretaceous	... Cretaceous of Central Himalayas South-East Coast Cretaceous Deccan Trap (दक्षिण पठार)		
Jurassic	... Upper Gondwana (Jabalpur and Rajmahal Series) Jura of the Himalayas <i>Spiti</i> shales	शालिग्रामीय काल Also called Oolite, <i>oon</i> , an egg, <i>lithos</i> , stone.	

## Tal Series of Garhwal

Triassic	... Middle Gondwana System Trias of the Himalayas and Salt Range	त्रयस्रकाल (from Gr. <i>trias</i> , the number three.)*
Permian	III.— <b>Palaeozoic Era</b> (Ancient Life). Lower Gondwana System. (Duration—360 million years. Began 550 million years ago.) .... (Damuda Series) Permian of the Himalayas (Zewan Series of Kashmir and the Productus shales of Spiti and the Central Himalayas.	पुराजन्तुक (from <i>palaaios</i> , ancient).  from Perm, a district in Russia.

\* Also called the Scythian Age (सक्युग) in Heim and Gansser's *Central Himalaya*, p. 206.

श्रीवर्ग समूह Dravidian Group

Carboniferous	Caboniferous of Spiti and Kashmir	अंगारभरित काल ( <i>carbo</i> , coal, <i>ferous</i> , bearing).
Age of great forests, World's coal resources traced to them.	<i>Pir Panjal</i> Volcanics. <i>Po</i> Series of Spiti. <i>Plateau</i> limestone.	
Devonian or Old Red sandstone. (Abundance of fishes.)	<i>Muth</i> Series of Spiti and Kashmir Devonian limestone of Hazara and Chitral.	From Devonshire in England. In India named from Muth, a pass of this name in Spiti.
Silurian	.... Silurian of Spiti and Kashmir.	
Ordovician	... Ordovician of Spiti and Kashmir.	हेमन्त काल (From Ordovices tribe of North Wales.)
Cambrian	... Haimanta system of Central Himalayas. (First appearance of fishes and the clothing of land with vegetation.)	हेमन्त काल

Purana Group पुराण समूह	<p><b>IV—Proterozoic (Earlier Life)</b> (Duration 450 Million years Began 925 million years ago.)</p> <p>Torridonian ... Vindhya system (Bhandar, Rewa, Karimpur series).</p> <p>Algonkian ... Lower Bijawar and Gwalior Series <i>Papaghni Series</i></p>	<p>प्रातः जन्तुक युग</p> <p>विन्ध्यश्रेणीय</p> <p>पापघनी श्रेणीय</p>
Vaikrita Group वैक्रित समूह	<p><b>V—Archaean or Eozoic Era</b> (Began 1,400 millions years ago)</p> <p>Archaean System ... <i>Dharwar System (Aravalli,)</i> Champaner, Shillong Gondite series; <i>Vaikrita Series</i> of Spiti <i>Jaunsar system. Simla system.</i> Bundelkhand and Bengal</p>	<p>ब्राह्मजन्तुक युग (from <i>Eos Dawn</i>, <i>zoë</i>, life.)</p> <p>Also called वैक्रित, from its crystalline basis.)</p>

Based on (1) *Geology of India* by D. N. Wadia, pages 43—47, (2) *Age of the Earth* by Dr. Arthur Holmes, (Benn's Library), page 31—32, (3) *Central Himalayas* by Arnold Heim and August Gansser, page 216 and (4) Burrard and Hayden's *Geography and Geology of the Himalayas.* (*V. S. Agrawala.*)





# RELIGIOUS CONDITIONS IN THE ASHTADHYAYI

BY

V. S. AGARWALA

The picture of religious life portrayed in the Ashtādhyāyī is dominated by the Vedic form of religion centering round various sacrifices at which Vedic gods were invoked according to the elaborate ritual prescribed in the Brāhmaṇa and Śrauta sūtra literature. The officiating priests and the fees which they received from the sacrificers are also mentioned (V. I. 69; V. I. 95). There are at the same time definite indications of a popular phase of religious belief and practices as elaborated in devotion to gods and asterisms, worship of images and the growth of religious ascetic orders. The popular or the folk mind, however, with its religious ideas and beliefs commonly held is not so well-represented in the Ashtādhyāyī.

## 1. DEITIES

First in order come the Vedic gods and goddesses who were receiving undiminished attention so far as the higher section of society was concerned. The names of Vedic deities appear alone or in pairs, e.g., mention is made of Agni (IV. 1. 37), Indra, Varuṇa, Bhava, Śarva, Rudra, Mṛiḍa (IV. 1. 49), Vṛishākapi (IV. 1. 37), Pūshā, Aryamā (VI. 4. 12), Tvashtā (VI. 4. 11), Sūrya (III. 1. 114), and Nāsatya (VI. 3. 75). The last name is derived by Pāṇini as *na asatyāḥ*, 'who do not lend themselves to falsehood'. The Mahābhārata mentions Nāsatya and Dasra as the twin Aśvins born of the nose (*nāsa*) of Samjñā, wife of Sūrya (Anuśāsanaparvan, 150. 17). This suggested derivation from *nāsa* is in fact mentioned by Yāska as a probable explanation of the word (*nāsikāprabhavau babhūvatur iti vā*, VI. 13). But Pāṇini has adopted the etymology of this word from the great teacher

Aurṇavābha whose opinion is also quoted by Yāska (*Satyau eva nāsatyau-ity-Aurṇavābhah*, Nirukta, VI. 13). Indra is also referred to as Maruttvān (IV. 2. 32). Pāṇini refers to Prajāpati under the symbolical name of Ka. Patañjali says that Ka is not a pronoun, but a proper name (*saṁjñā chaishā tatrābhavataḥ*, II. 275), so that the dative case of this Ka would be *Kāya*, not *Kasmai*. Reference is also made to the deity called Vāstoshpati who presided over the house or homestead and was as old as the Ṛigveda. Pāṇini's mention of Gṛihamedha (IV. 2. 32) under the context 'This is its deity' (IV. 2. 24) shows that Gṛihamedha also was looked upon as a deity. In the same context mention is also made of Soma, Vāyu, Mahendra and Apāmnapatṛi (IV. 2. 27), the last being a name of Agni as sprung from waters to whom special oblation was offered.

Of the pairs of deities (*devatā-dvandva*, VI. 2. 141) a long list is given in the Ashtādhyāyī, viz., Agni and Varuṇa (VI. 3. 27), Agni and Soma (IV. 2. 32; VI. 3. 27), Dyau and Pṛithivī (IV. 2. 32; VI. 3. 29-30), Ushā and Sūrya (VII. 3. 31), the twin agricultural deities Śunāsīra, and others as Somā-Rudra and Indrā-Pūshan (VI. 2. 142). Even the Somagrahas Śukrā-Manthina are mentioned under the context of 'twin deities' (VI. 2. 142). Of the female deities the older goddesses mentioned are Indrāṇī, Varuṇāṇī, (IV. 1. 49), Agnāyī, Vṛishakapāyī (IV. 1. 37), Pṛithivī always referred to as a pair with Dyau, and Ushas for whom oblations were cooked as for an independent deity (IV. 2. 31).

### *Post-Vedic Deities.*

The four names of the goddess Pārvatī explicitly mentioned in sūtra IV. 1. 49 as Bhavāṇī, Śarvāṇī, Rudrāṇī, and Mṛīdāṇī belong to the sūtra period. Although the names of their male counterparts Bhava, Śarva, Rudra, Mṛīda were known as synonyms of Rudra-Śiva in the Vedic period, the emergence of corresponding goddesses was a feature of the post-vedic epoch. The Śatapatha Brāhmaṇa

mentions *Rudra*, *Śarva*, and *Bhava* as forms of *Agni* (VI. 1. 3. 18), and makes the important statement that the name *Śarva* was popular in the *Prāchya* country and *Bhava* in the *Vāhika* region (शर्व इति यथा प्राच्या आचक्षते भव इति यथा वाहीकाः, Ś. B. I. 7. 3. 8). It may, therefore, be inferred that the names *Śarvānī* and *Bhavānī* were local designations of one and the same goddess known as *Ambikā*. In the beginning, *Rudrānī* and *Mṛīḍānī* too were probably used as more common epithets in some particular parts only of the country.

*Āditya* referred to in *sūtra* (IV. 1. 85) is to be taken as the name of the classical sun-god rather than of the Vedic *Ādityas*. In fact a new feature of the Pāṇinian pantheon is the emergence of time-denoting words raised to the status of deities (IV. 2. 34). As for example, the oblation which was meant for the month as deity was called *Māsika* and similarly for the year *Sāmvatsarika*. The seasons also were deified as in *Vāsantam haviḥ*. Pāṇini himself refers to *Ritu* as a deity (IV. 2. 31) in whose honour some religious act was performed. This tendency found its fullest expression in elevating the names of stars to the status of deities. This is indicated by the elevation of *Proshthapada*, a name of *Bhādrapada*, to the rank of a *devatā* (IV. 2. 35). The whole system of adopting personal names from the names of asterisms for which detailed rules are given by Pāṇini (IV. 3. 34, 36, 37) must have been the result of a definite change in the attitude of the people towards the stars. Names like *Rohiṇishena*, *Bharaniṣhena*, and *Śatabhishaksena* which are distinctly implied in the *sūtra* नक्षत्राद्वा (VIII. 3. 100) point to a belief in the beneficent nature of the deities presiding over the asterisms.

### *Bhakti.*

The new phase of religious belief found its expression in the doctrine of *bhakti* or devotion to particular gods and goddesses. The morphology of such names as *Varuṇa-*

datta and Aryamadatta of which the contraction is regularised specifically by sūtra V. 3. 84 brings out one prominent fact, viz., that it was believed that gods like Varuṇa, and Aryamā, if propitiated, would confer the birth of a son to be named accordingly. Pāṇini admits that the name-ending *datta* denoted a benediction from a god or a higher power of which the personal name became a symbolic expression (कारकाद्वत्तुतयेरेवाशिषि, VI. 2. 148).

This attitude of religious approach very well accords with Pāṇini's reference to *bhakti* or devotion to deities and divine beings of whom Vāsudeva and Arjuna have been mentioned in sūtra IV. 3. 98. Patañjali clearly remarks that Vāsudeva was in this sūtra intended not as a mere Kshatriya name but as the personal name of Kṛishṇa to whom *bhakti* was expressed by the form Vāsudevaka. We must, however, admit that *bhakti* in this context (IV. 3. 95-100) has a secular significance also. But its religious significance cannot be altogether ruled out. In proof of this we must consider the reference to Mahārāja (महाराजट्ठ IV. 3. 97).

### *Mahārāja.*

Besides referring to the *bhakti* known to Mahārāja as stated above, Pāṇini definitely mentions that Mahārāja was a *devatā* (IV. 2. 35), to whom oblations were offered. Patañjali also mentions the *bali* offered to Mahārāja as *Mahārāja-bali* (I, 388, cf. also Kāśikā, II. 1. 36). This deity must be identified with those mentioned in a group of the Four Great Kings (*Chātummahārājika*, Jāt. V. 474). In Jātaka VI. 265 Vessavaṇa is called a Mahārāja and in the Mahāsutasoma Jātaka Śakra and the other three Lokapālas are styled as Mahārājāno (VI. 259). They also stand at the head of the list of gods and other super-human beings in the Aṭṭanāṭṭiya Sutta (*Dict. of Pali Proper Names*, I. 242). The *bhakti* in the case of Vāsudeva seems to be of the same religious kind as that shown to Mahārāja mentioned in the preceding sūtra.

*Vāsudeva-cult.*

Pāṇini's reference to Vāsudeva and his *bhakti* raises the question of the antiquity of his cult. Kaiyaṭa considers Vāsudeva as the name of the Supreme Being (*paramātmā-devatāviśeṣa*). Keith accepts the accuracy of this identification and considers the remark of Patañjali, viz., *saṁjñā chaishā tatrābhavataḥ* to be 'the most satisfactory proof of the identity of Vāsudeva with Viṣṇu for except through such identification no one could dream of putting Vāsudeva on the same plane as Ka. (*JRAS*, 1908, p. 848). Patañjali's reference to the staging of *Bali-bandhana*, Viṣṇu's famous deed, and the slaying of Kāṁsa, Kṛishṇa's famous exploit, were regarded by Weber himself as hinting at the fact of the existence of Kṛishṇa-Vāsudeva cult and his quasi-identification with Viṣṇu (*JRAS*, op. cit., p. 847) in the second century B.C. These exploits formed part of the Viṣṇu legend, and they must have been considerably older (cf. the example, *Jaghāna Kāṁsam kīla Vāsudevaḥ*, Bhāshya quoting it as a past event, II. 119). Not merely this, Patañjali also refers to the *vyūha* of Kṛishṇa and his three acolytes in a quotation which has remained unnoticed : जनार्दनस्तत्रात्मचतुर्थ एव, i.e. Janārdana whose self is the fourth in a constituent group, (Bhāshya, III. 43 on sūtra VI. 3. 5). He also mentions Kṛishṇa and Saṁkarshaṇa leading a force together (I. 426) and refers to the existence of temples dedicated to Keśava and Rāma (*Prāsāde Dhanapati-Rāma-Keśavānām*, I. 436). In sūtra VIII 1. 15 Pāṇini says that *dvandva* signifies a pair of those persons whose names are famous together (*abhividyakti*), on which the Kāśikā cites *Samkarshaṇa-Vāsudevau* (द्वावप्यभिव्यक्तौ साहचर्येण). Devotional worship of Saṁkarashaṇa and Vāsudeva in connection with religious shrines is proved by inscriptional evidence of the second century B.C. (Nagari Ins., *Ep. Ind.* XXII, p. 198, ff). The testimony of the Besnagar column also supports the antiquity of the Bhāgavata religion in the Śuṅga period. The Arthasāstra not only refers to the legend of

Kṛishṇa and Kamsa (XIV. 3) but also ordains the building inside the city of temples sacred to god Apratihata or Vishṇu (II. 4). Most of these examples are no doubt of the Śuṅga period, but they depict how popular the tradition of Kṛishṇa's divinity was in that age, which could not have grown up all at once but must have been the result of centuries of prior evolution. Patañjali's reference to the Śiva-Bhāgavata religion (II. 387) also supports the great antiquity of the Bhāgavata cult before his time for the Śaīvas must have adopted it as a settled term from the Bhāgavatas to designate their own religion based on the divinity of Śiva. Although the evidence from the gaṇapāṭha is not so certain, it must be mentioned that the Gavāsva group (II. 4, 13) reads *Bhāgavati-Bhāgavatam* as a compound word in singular number mentioning a female and a male follower of the Bhāgavata religion. Grierson maintained the antiquity of the Bhāgavata religion to Pāṇini's time on the basis of his knowledge of Vāsudeva as a divinity (*JRAS*, 1909, p. 1122), and Dr. R. G. Bhandarkar also thought that Patañjali—and on his testimony Pāṇini also—may be safely considered to speak of Vāsudeva as a divine being (*JRAS*, 1910, p. 170, Vāsudeva of Pāṇini IV. 3. 98).

### *Images.*

( Divine images are mentioned under the category of *pratīkṛitis* (V. 3. 96), 'like-representations' or portraits. Patañjali uses the word *archā* for an image<sup>1</sup> (cf. *Maurayaiḥ archāḥ prakalpitaḥ*, II. 429). The word is the subject of special derivation in Pāṇini as *archā* and *archāvān*, one possessing an *archā* (V. 2. 101), probably an image-owner who made it the means of his livelihood. The sūtra *Jivikārthe chāpanye* (V. 3. 99) regulates the formation of

<sup>1</sup> *Archā* originally used with special reference to 'worship of images', in the Mahābhāshya had come to mean 'image of a god', cf. *Dirgha-nāsikī archā*, *tuṅga-nāsikī archā* (II. 222). See Lüders' discussion of its use in Mora Well Inscription, *Ep. Ind.*, XXIV, p. 198).

the names of images of gods which were not intended for sale (*apanya*), but which were worshipped in temples (*pūjārthāḥ*, Bhāṣya II. 429), and incidentally served as means of livelihood to their owners. Patañjali mentions the images of Śiva, Skanda and Viśākha as examples to the sūtra. Images of Śiva and Vaiśravaṇa are also mentioned by Kauṭilya (II. 4) to be installed in temples. The names Brahma-Prajāpati, Śiva-Vaiśravaṇau, Skand-Vaśākhau are included in the gaṇapāṭha to II. 4. 14, and from their mention in an illustrative vārttika of Kātyāyana on VI. 3. 26 as forming pairs of divinities whose names go together, we may attribute the reading in the gaṇapāṭha to Pāṇini himself. Besides he mentions Brahmā in sūtra VI. 4. 171, and Prajāpati under the name of Ka in IV. 2. 25. These names have a distinctly classical ring about them. As Patañjali informs us, the above gods were not mentioned in pairs in the Vedic literature (*na chaite Vede sahaivopanirdiṣṭāḥ*) but known only in *loka* (III. 149; VI. 3. 26). Śiva and Vaiśravaṇa supplied the two main focal points for the development of the popular cult of Bhūtas, Yakshas, Nāgas, and other lower orders of divine beings or *gaṇas*. We know that Pāṇini refers to the worship of Mahārāja, another name of Vessavaṇa Kubera, who headed the group of the Four Great Kings (Chātummahārāja) or Regents of the four quarters and was the king of the Yakshas in the north. Pāṇini also mentions the descendants of Dhṛitarāja (VI. 4. 135) who may be identified as the Lokapāla Dhataratṭha ruling in the east at the head of the Gandhabbas.)

### *Demons.*

In mentioning the demons Pāṇini is obviously drawing on older literature rather than recording contemporary beliefs. Diṭi (IV. 1. 85), mother of the Daityas, Kadrū (IV. 1. 72), Asuras (IV. 4. 123), Rākshasas and Yātus (IV. 4. 121) are referred to, but in connection with

forms of the older language. Sūtra IV. 1. 59 refers to Dīrghajihvī as a form of the Chhandas language (cf. Jaiminiya Br. I. 161). She was the daughter of Virochana and sister of Bali (Rāmāyana, I. 23. 18). The *āsuri māyā* (IV. 4. 123) similarly appears to be an old word signifying thauturgy or the *Asura-vidyā* (cf. Āśv. Śr. X. 7, and Ś.B., XIII. 4. 3. 11). The female demon Kusitāyī, wife of Kusita (IV. 1. 37) occurs in the Maitrāyaṇī Saṁhitā (III. 2. 6). The planet Rāhu is referred to as Vīdhumtuda, which points to the antiquity of the myth that this planet is antagonistic to the moon (*Vidhvarushostudaḥ*, III. 2. 35).

## 2. YAJÑAS

### *Yājñikas.*

Yāska quotes the opinions of the Yājñikas along with those of the Nairuktas, revealing the high respect and authority in which the exponents of the Yajña doctrine were held in his time. They enjoyed a long prior tradition since Pāṇini also refers to the school (*āmnāya*) of the Yājñikas known as *Yājñīkya* (IV. 3. 129), and Patañjali not only invokes the weight of their authority in support of his thesis justifying the study of grammar (I. 1), but also mentions their treatises *Yājñīka-śāstra* (I. 9). It appears from the *Asṭādhyāyī* that the Yajña doctrine both in its theory and practice dominated the spiritual and religious ideals of the people. Pāṇini records minute details regarding the peculiarities of pronunciation of such formulas as the *Subrahmanyā* (I. 2. 37), *Nyūṅkha* (I. 2. 34) and *Yājyā* verses (VIII. 2. 90), and his references relate not merely to academic discussions, but to actual problems arising out of the performance of sacrifices (*yajña-karmaṇi*, I. 2. 34, VIII. 2. 88).

### *Yājñika Literature.*

Besides the Brāhmaṇas and the Anubrāhmaṇas (IV. 2. 62) a vast body of specialised *yājñika* literature in the



form of explanatory texts (*vyākhyāna*) of the Kratus (Soma sacrifices) and other Yajñas had come into existence (IV. 3. 68). For example, a treatise concerning the exposition of Agnishtoma was called *Agnishtomika*; similarly, there were special texts devoted to Vājapeya and the Rājasūya sacrifices. Of particular interest is Pāṇini's reference to works called *Puroḍāśika* containing detailed instructions for the preparation of *puroḍāśa* oblations, and to others called *Pauroḍāśika* (IV. 3. 70) containing an explanation of the mantras recited at the time of making the *puroḍāśa*. These special handbooks arose to meet the practical needs of the priests.

#### *Yajamāna (Sacrificer).*

The sacrificer was called *yajamāna* (III. 2. 128) for the duration of the sacrifice, which earned for him the more permanent title of *Yajvā* in his later life (III. 2. 103). He also derived a name with reference to the particular sacrifice which he had performed. Provision to regulate this nomenclature is found in sūtra III 2. 85 (करणे यजः); as for example, *Agnishtoma-yājī* was the epithet of one who had gone through the ceremony of an Agnishtoma. A person who made it a habit of life (*tach-ḥhila*) to perform *yajñas* frequently was called *yāyajūka* (III. 2. 166), an epithet of doubtful compliments.

#### *Āspadas.*

The distinctions of social honour prevailing amongst the Brāhmaṇas are referred to as *āspada* (आस्पदं प्रतिष्ठासाम्, VI. 1. 146), a word used even today. The claims to the honour of *āspadas* mostly originated from the performance of *yajñas*. The system of honour-denoting epithets as *Vājapeyī*, *Agnihotrī*, which are added after the names of Brāhmaṇas even now can be traced back to the time of Pāṇini. For example, he refers to *Ahitāgni* (II. 2. 37), one who kept the domestic fire; to *Avasthika* (IV. 4. 74) one who had entered the *avasatha* abode of the fires, this designation being current in present-day society as *Avasthi*,

*Names of Yajñas (Yajñākhyā, V. 1. 95).*

*Yajña* is derived from the root *yaj* to worship or honour with offerings (III. 3. 90). *Ijyā* in the same sense was a classical verbal noun (III. 3. 98). Amongst the four Vedas the Yajurveda deals with sacrifices, and Pāṇini makes a general reference to all the *Kratu*s or Soma sacrifices mentioned in the Adhvaryuveda which was but another name of Yajurveda (II. 4. 4). A distinction is made between *Kratu*s and *Yajñas*, as both are mentioned separately in sūtra IV. 3. 68. According to the *Kāśikā* *Kratu* is the name of only the Soma sacrifices (II. 4. 4). According to Patañjali *Yajña* is a much wider term which includes such well known *Kratu*s as Agnishtoma, Rājasūya and Vājapeya and also the *Pākayajñas* which were performed in the domestic fire (IV. 3. 68; II. 812). The word *Kratu* was applied to celebrated sacrifices like Agnishtoma, and also to their manifold variations like Pañchaudana, Saptaudana and Śataudana, etc. Of great interest is the sūtra *Dviguḥ Kratau* (VI. 2. 97) which prescribes the accentuation of the names of sessional Soma sacrifices when compounded with the names of the Yajamānas, e.g. Gargatrirātra, Charaka-trirātra and Kusurabindu-Saptarātra, i.e., the Soma sessions of so many days performed by the Gargas, Charakas, etc.

Of special sacrifices Pāṇini mentions Agnishtoma (VIII. 3. 82), Jyotishtoma, Ayushtoma (VIII. 3. 83), Rājasūya (III. 1. 114) and Turāyaṇa (V. 1. 72). The Ayushtoma was performed to obtain long life and formed part of the Abhiplava ceremony. The Turāyaṇa was a modification of the Purnamāsa and a Yajamāna who selected to perform it was called *Taurāyaṇika* (V. 1. 72). The Śāṅkhyāyana Brāhmaṇa speaks of Turāyaṇa as a yajña performed for the attainment of heaven (*sa esha svargakāmasya yajñah*, IV. 11). *Kundapāyya* (at which Soma is drunk with ewers) and *Saṅchāyya* (at which Soma is stocked or accumulated) are given as names of special *Kratu*s (III. 1. 130).

Reference is also made to *Dirghasatras* or sacrifices extending over long durations of time, such as a century or a thousand years (VII. 3. 1). No doubt the *Brāhmaṇa* books describe these *yajñas*, e.g., the *Viśvasṛj* sacrifice which lasted for one thousand years (*sahasrasama sattra*), but we have the testimony of Patañjali saying that such long sacrifices were non-existent in society (*loke aprayuktāḥ*) although the *Yājñikas* described them in their treatises as part of traditional lore (*kevalam ṛishi-sampradāyo dharma iti kritoḥ Yājñikāḥ śāstreṇānuvidedhate*, *Bhāṣya* I. 9, *Vār.*, *Aprayukte dirghasattravat*).

### *Soma.*

Pressing of Soma is referred to as *sutyā* (III. 3. 99) and one who pressed it as *Somasut* (III. 2. 90). Distillation of Soma during the progress of a sacrifice is also mentioned (III. 2. 132). After the ceremony was over, the Soma-presser *yajamāna* came to be known as *sutvā* (III. 2. 103), corresponding to the other title *yajvā*. The drinking of Soma depended on the fulfilment of certain spiritual and material conditions. According to Pāṇini he who had the requisite qualification to drink Soma was called *saumya* (*Somam arhati yah*, IV. 4. 137). In the opinion of the *Yājñika* school as quoted by Patañjali that person was entitled to drink Soma in whose family no one had suffered social degradation during the preceding ten generations (*Evam hi Yājñikāḥ paṭhanti: Daśapuruśhānūkam yasya grihe śūdrā na vidyeran sa Somam pibediti*, *Bāṣya* II. 248; IV. 1. 93). Manu looks at the problem of drinking the Soma from an economic point of view and lays down the sound rule: 'He who owns food enough to last for three years or more with which to maintain his dependents, is worthy to drink Soma' (*sa Somam pātum arhati*, *Manu*. XI. 7). 'If one attempts the course with a stock thinner than what is prescribed, his labour is wasted' (XI. 8). We may take it that these wholesome regulations were observed in their true spirit as shown

by the emphatic wording of Pāṇini's sūtra with regard to the signification of the word *saumya*.

### *Names of Fire (Agnyākhyā, III. 2. 92.)*

Agni is spoken of as the agent carrying the offering of the sacrificer to the gods as *havyavāhana*, and to the manes as *Kavyavāhana* (III. 2. 65). In these two capacities it received the offering with the formulae *Svāhā* and *Svadhā* respectively (II. 3. 16). The former is further divided according to its functions as *Gārhapatya agni* used for domestic Pakayajñas (IV. 4. 90) and *Chitya agni* used for performing Soma sacrifices (III. 1. 132). Of the three Śrauta Fires the *Dakṣiṇāgni* is mentioned by the special name *Ānāyya*, i.e., fit to be brought in a later ritual from the household fire and not kept burning after the sacrifice (III. 1. 127, read with Bhāṣya II. 89). The arrangement of fire in the sacrifice is called *agnichityā* (III. 1. 132) and different names are mentioned by Pāṇini to denote different arrangements such as *parichāyya*, *upachāyya*, *samūhya* (III. 1. 131). In one sūtra Pāṇini regulates the formation of the names of those Agnis for which elaborate arrangement of bricks is prescribed in the Brāhmaṇas, e.g., *Śyenachit*, *Kāṅkachit* (III. 2. 92). One who established the sacrificial fire was known as *agnichit* (III. 2. 91).

### *Other Accessories.*

The performance of a *yajña* required a number of accessory articles of which some are mentioned in the Ashṭādhyāyī. A portion of the sacrificial area was named *saṁstāva* (III. 3. 131), a special area set apart for recitation (*stuti-bhūmi*, *Amara*) where the Chhandoga singers sang the hymns in the Soma-kratus. Another portion was the *avaskara*, a pit for throwing refuse (IV. 3. 28). The *kuśa* grass, a necessary equipment of the sacrifice, is referred to under the special name of *pavitra* (III. 2. 185). The Soma plant was required for Soma sacrifices,

but whether the original Soma was still identified and obtainable is uncertain. Patañjali's statement that according to Vedic rules of option the *pūtika* grass was used as a substitute for Soma casts doubt whether the original plant was known in the second century B.C., although he takes care to add that Soma had not become obsolete (*abhūtapūrvā*, I. 137). The sacrificial utensils (*yajñapātra*, I. 3. 64) specially the cups for drinking Soma were arranged in pairs, stated as one of the meanings of the word *dvanda* (यज्ञपात्रप्रयोग, VIII. 1. 15). Oblation is mentioned as *havi*, a special form of which was known as *sāmnāyā* (III. 1. 129), said to consist of milk taken from a cow on the eve of the new moon, mixed with the next day's milk, and then offered along with clarified butter. The inter-mixing of the two days' milk seems to be responsible for the peculiar name.

Special kinds of *vedis* were made in some sacrifices twice or thrice as large as the usual size, called *dvistāvā*, *tristāvā* (V. 4. 84). Like the regulation to form different names of fires (III. 2. 92), there is a provision to form the names of special bricks with which fire altars were constructed (IV. 4. 125, *Tadvānāsamupadhāno mantra itīṣṭakāṣu lukcha matoḥ*). According to this rule an important word occurring in the mantra used for laying a brick was used as the basis of naming it. Such examples of brick names as *Varchasyā*, *Tejasyā*, *Payasyā* and *Retasyā* were ancient words which have been only grammatically dealt with by Pāṇini. Special reference is made to bricks called *Āśvinī* (IV. 4. 126).

### *Priests.*

The term *ṛitviḥ* (III. 2. 59) denoted all the different kinds of priests employed at the sacrifices. It appears that the priests were of the Brahmana caste as in the Vedic period (*Vedic Index*, I. 112). This is suggested by the example *ārtvijīno Brāhmaṇaḥ* on Pāṇini (V. 1. 71) in which a person qualified to officiate

as priest is mentioned. The priest with reference to his duties in officiating at the sacrifice on behalf of the *Yajamāna* was called *yājaka*, and it is implied in Pāṇini's rule II. 2. 9 that *yājaka* was used as an epithet of the priest in conjunction with the caste of the sacrificer, e.g., *Brāhmaṇayājaka*, *Kshatriyayājaka*. Selection of priests depended on their special knowledge of the ritual of the sacrifice for which they were invited to officiate. Pāṇini refers to the emergence of specialists who made an exhaustive study of the complicated Soma sacrifices like Agnishtoma and Vajapeya, and on account of their deep learning and mastery of the rituals were celebrated by special designations borrowed from the names of *Kratus* (IV. 2. 60). Whenever there was a proposal to inaugurate an important sacrifice the invitation would naturally be sent to such adepts. They were supposed to cultivate along with their pupils (*Tadadhīte tadveda*) advanced studies of highly specialized sacrificial lore.

In the developed ritual which we find in the Brāhmaṇas the number of priests was sixteen, who were technically classed in four groups (see *Vedic Index* I. 113 for their names). Of the priests connected with the R̥gveda Pāṇini mentions Hotā, Praśāstā (VI. 4. 11), and Grāvastut (III. 2. 177). The Praśāstā was also known as Maitravaruṇa. The Grāvastut praised the stones (*grāvā*) for pressing Soma. The Hotā sang the *yājyā* and *anuvākyā* verses. Amongst the Sāmaveda priests the Udgāta is mentioned in a sūtra (V. 1. 129) which also includes his assistant Pratihartā in the gaṇa. The duties of the various priests were indicated by special words formed by the addition of suffixes to their names, those of the Udgāta being known as *audgātra*.

Of the Yajurveda priests the Adhvaryu is mentioned with his assistant Neshtā (IV. 3. 123; VI. 4. 11); the latter belonged to the ritual of a Soma sacrifice and was so called from his chief function to lead forward the wife of the sacrificer. The importance of the Adhvaryu in-

creased with the growth of the complicated ritual in which differences of opinion must have naturally arisen. It appears that the followers of each special recension of the Yajurveda adopted the ritualistic peculiarities of their own school. The double insistence on variations of ritual according to locality and the Vedic recension (*āmnāya*) must have resulted in the growth of special Adhvaryu priests who were designated by distinctive names. This is fully reflected in sūtra VI. 2. 10 (*Adhvaryu-kashāyayor-jātau*); the priests belonging to east India who appear to be adherents of the White Yajurveda were called Prāchyādhvaryu, and the followers of the special schools of the Black Yajurveda were distinguished by the names of their *śākhās* as Kāṭhādhvaryu, Kalāpādhvaryu, etc. The duties of Adhvaryu were called *ādhvaryava* (IV. 3. 123).

Brahmā (V. 1. 136), Agnīdha (VIII. 2. 92) and Hotā (VI. 4. 11) are the priests connected with the Atharvaveda whose names occur in the Ashtādhyāyī. Even before Pāṇini the office of the Brahmā had evolved into that of the general supervisor of the ritual. This is proved by his duties (*karma*) being indicated by the special word *Brahmatva* (V. 2. 136) which was expressive of a dignified position above the rest. Moreover the epithet Mahā-Brahmā (V. 4. 105) seems to have been derived from the privileged position of the Brahmā priests.

The sons of *ritvijs* have been specially noticed in sūtra VI. 2. 133 as *Hotuḥputra*, and the reason for such names being applied to sons from the calling of their father appears to be that they continued in the same profession and probably acted as assistants in the ritual in the company of their elders.

### *Mantra Recitation.*

A Yajña implies the worship of the deities with the recitation of mantrās (*mantrakaraṇa*, I. 3. 25). Joint recitation distinguished by clear uttering of tone and accent

was called *samuchchāraṇa* (I. 3. 48). Invocation of deities was called *nihāva* and *abhihāva* (III. 3. 72). Pāṇini gives special rules of accentuation prevailing in the recitation of particular *yajña* formulas, e.g., the vowel of *ye* forming part of the sentence *Ye yajāmahe* was uttered with circumflex accent (*pluta*) only during the progress of the sacrifice (VIII. 2. 88). This formula bears the name of *āgūrta*, which was the same as *abhigūrta*, always preceding the chanting of the *Yājyā* mantras by the Hotā (Haug, *Ait. Br.* xviii).

The *āgūrta* formula was followed by the pronouncing of the *Yājyā* mantra itself which was the most important part of the duties of a Hotā. From Pāṇini we learn that the last syllable of the *Yājyā* verse was made *pluta* (VIII. 2. 90, *Yājyāntaḥ*).

The *Yājyā* or the sacrificial verse is the soul of each oblation in the sacrifice. To mark the end of each *Yājyā* the Hotṛi priest exclaimed the *Vaushaṭ*-formula. Immediately after hearing it the Adhvaryu priest cast the oblation offered to the deity into the fire. The *Vaushaṭ*-formula was pronounced with the *pluta* accent (cf. sūtra VIII. 2. 91).

Pāṇini also deals with the two important formulas uttered by the Adhvaryu and the Agnīdhra. As often as the Adhvaryu has to commence a set of oblations he addresses to the Agnīdhra priest who is the protector of the sacrifice the formula '*O śrāvaya*'. This is known as *Agnīṭ-preshaṇa* (VIII. 2. 92). To this the Agnīdhra responds by saying '*Astu Śraushaṭ*'.

Pāṇini teaches that the first vowel in *Śraushaṭ* and the first and second in *O śrāvaya* are to be pronounced in the *pluta*-way, i.e., with three moras (Haug, *Ait. Br.* xvii). Of greater interest is Pāṇini's allusion to the doctrine of *Ēkaśruti*, tonelessness or monotony of pronunciation in the *Yajñas*. This means that toneless muttering of hymns had begun to be practised in sacrifices, a proof of the growing laxity in pronouncing the



accent (I. 2. 34). There were three exceptions to the rule of *Ekaśruti*, viz., silent muttering (*japa*), pronouncing the sixteen *Nyūṅkha Omkaras* and in chanting *Sāmans*. *Ekaśruti* is recognised in the *Taittirīya Prātiśākhya* as *sarvaṃ ekamayan*, 'all-in-one accent' (T. Pr. XV. 9). It appears that even the advocates of the absence of accentuation favoured the optional pronouncing of *vaushaṭ* with an acute accent (*uchchaistarām vā Vashṭkārāḥ*, I. 2. 35). Pāṇini's own view seems to be for *pluta* accent as given in sūtra VIII. 2. 91. The *Subrahmaṇyā* formula which gave its name to an assistant of the *Udgātā* priest who recited it, also had its definite rules of accentuation taught by Pāṇini (I. 2. 37-38). It was a loud invocation addressed to Indra in the *Jyotiṣṭoma* and other *Soma* sacrifices (cf. *Kullūka* on *Manu*, IX. 126; Haug. *Ait. Br.* p. 260).

*Upāyāj* was the special name (III. 2. 73) denoting the eleven short formulas (*samudram gachchha svāhā*, etc.) collected in *Yajurveda* VI. 21. Reference is also made to the *Sāmidhenī* verses of the *Rigveda* known by the special name *Dhyāyyā* (III. 1. 129), and to the *Prayāja* and *Anuyāja* portions at the beginning and end of sacrifices (VII. 3. 62).

The mention of these minute details very clearly shows that the great grammarian was in touch with the living tradition of the sacrificial ritual. Far from being a thing of the past the *Yajñas* appear to be still a moving force in the lives of the people, who were inspired by the ideal of spiritual purity and progress inculcated by the *Yājñika* philosophy. The title *pūtakratu* seems to have assumed a new significance, denoting the man whose mind was purified by the potions of *Soma* quaffed at the *Kratu* sacrifices. His wife, *Patnī*, who was his partner in the sacrifices (*Yajña-samyoga*, IV. 1. 33) shared in the distinction under the ennobling appellation of *pūtakratayī* (IV. 1. 36).

The institution of the *yajñas* had a vital economic interest for the officiating priests who received the *dakshi-*

na or the sacrificial fees. In respect of their distribution detailed instructions are contained in the law-books. Pāṇini's reference to various kinds of *dakṣhiṇās* shows that they were current in his days. We are told that the name of the particular sacrificial guerdon was derived from the name of the sacrifice at the end of which it was paid (*Tasya cha dakṣhiṇā yajñākhyebhyaḥ*, V. 1. 95). The illustrations given refer to the fees paid at the Rājasūya, Vājapeya and Agnishtoma sacrifices. The words *dakṣhiṇīya* and *dakṣhiṇya* were applied to one whose merits entitled him to receive the proper *dakṣhiṇā* (V. 1. 69). The social relationships between the priests and the *yajamānas* arising out of sacrifices constituted one of the happiest features of domestic life. Patañjali refers to the *srauva sambandha* (relationship through *sruva* or *ladle*, I. 119) to be as much a reality as other relationships contracted through money (*ārtha*), blood (*yauna*) and education (*maukhā*). His reference to priests wearing red turbans (*lohitośṇīsha*, I. 426) seems to be taken from real life.

### 3. ASCETICS

There are casual references in the Ashṭādhyāyī to another phase of life which found its expression in the institution of Sanyāsa. It was a recognized means of seeking fulfilment of one's spiritual aspirations. The religious mendicant is referred to as *bhikṣhu* (III. 2. 168) and also as *bhikṣhāchāra* (III. 2. 17). The ordinary beggar was distinguished by the name *bhikṣhāka* (III. 2. 155). *Privrājaka* too seems to have been applied to a religious ascetic (VI. 1. 154). Pāṇini mentions both the orthodox Brahmanical ascetics and the heretical sects. The reference to ascetics studying the *Bhikṣhu-sūtras* promulgated by Pārāśarya (IV. 3. 110) affords strong proof of the fact that monks of the religious order following the school of Pārāśarya, were known to Pāṇini. He also mentions other classes of *bhikṣhus*, e.g.,

those who followed the spiritual discipline taught by the teacher Karmanda (IV. 3. 111).

The life of a *bhikṣhu* or a religious ascetic who consciously adopted that path for his spiritual well-being was governed by the ideal of *tapas* on account of which he was also called a *tāpasa* (III. 2. 103) or *tapasvin* (V. 2. 102). The actual performance of *tapas* is also alluded to (III. 1. 15). Pāṇini's reference to *śamī*, *damī*, *yogī*, *vivekī*, *tyāgī* (III. 2. 142) implies such moral and spiritual virtues as are cultivated by those devoted to the pursuit of higher life. The epithets *dānta*, *śānta* (VII. 2. 27) signify control of the senses and the mind respectively. The word *yogī*, although its meaning is unexplained, probably had reference to those who were adherents of the Yoga way of life.

A recluse subsisted on what he obtained by begging. Pāṇini uses the word *sarvānnāna* to denote a person who could eat any kind of food (V. 2. 9) and this is understood by the Kāśikā to refer to a monk (*bhikṣhu*) who had no scruples in accepting his food from any giver. There were others who followed a more rigorous course by gleaning corn (*Uñchhati*, IV. 4. 32). Those living by the *uñchhavṛitti* held stock of corn to last for some time. There is an interesting word to be considered in this connection. In sūtra VI. 2. 9 Pāṇini uses the word *śārada* meaning 'new'. Literally *śārada* signifies that which belongs to Śarad or autumn. The transition of meaning can be explained like this. Manu ordains that the *muni* should glean his stock of corn twice in the year; this was therefore called *vāsanta* and *śārada* respectively in relation to the two crops harvested in the two seasons (*Manu*, VI. 11). It is also laid down that he should change his clothing and corn in the month of Āśvayuja, i.e., in the beginning of autumn (*Manu*. VI. 15). It would thus appear that fresh stocks were obtained in Śarad by the forest-dwelling recluses; thus *śārada* signifying fresh stocks of the autumn season eventually ac-

quired the meaning 'new'. The staff, antelope-skin (*danḍā-jina*, V. 2. 76) and a *kamaṇḍalu* must have formed part of a monk's bare equipment. The word *naikaṭika* which Pāṇini derives in the sense of one who has taken his abode in proximity (*nikaṭe vasati*, IV. 4. 73) is taken by the commentators to refer to a monk who has become a Vānaprastha and who in obedience to the rules of his order took lodgings in the vicinity of the village. Similarly *kaukk-utika* which Pāṇini regulates as a noun is taken by the Kāśikā to refer to a mendicant who walked with his gaze fixed on the ground to avoid harming life (IV.4.46).

All ascetics were not uniform in observing the discipline of their order. There were sham ascetics too who brought ill-fame to their class. For example, one who adopted the monk's emblems of *danḍa* and *ajina* to serve his selfish ends was condemned as a hypocrite (*dāṇḍā-jinika*, V. 2. 76, *dāmbhika* according to Kāśikā).

### *Ayaḥśūla.*

Pāṇini refers to *āyaḥśūlika* as one who served his purpose by the method of *āyaḥśūla* or the iron-spike-method (V. 2. 76). Patañjali's comment on this sūtra is of great historical interest. Discussing the meaning of *ayaḥśūla* he says that if it literally means an iron-spike the word so formed will apply to a Śiva-Bhāgavata which is not the intention of Pāṇini's sūtra. Therefore *ayaḥśūla* signifies violent methods and the man who takes recourse to them was nicknamed *āyaḥśūlika* (Bhāṣya, II. 387). Patañjali here gives the information that there was a sect of the Śiva-Bhāgavatas (who worshipped Śiva as Bhagavān) whose special distinctive emblem while appearing in public was an iron spike or spear (*Ind. Ant.*, 1912, p. 272). This proves the existence of the Śiva-Bhāgavata cult in the time of Patañjali.

### *Maskarin.*

Pāṇini makes the simple statement that *Maskarin*

was a *parivṛājaka* (VI. 1. 154, *Maskara-maskariṇau veṇuparivṛājakayoḥ*). Maskarin is taken to refer to Maskarī Gośāla, the founder of the Ajivika order who was a contemporary of Gautama Buddha. We are indebted to Patañjali for a very trustworthy hint in this direction. He writes: 'A Maskarī *prairvājaka* is so called not because there is a *maskara* (bamboo staff) with him. What else then is the explanation? 'Do not perform works, seek peace as the highest end', this is his teaching, therefore is he called a Maskarin' (मा कृत् कर्माणि मा कृत् कर्माणि, शान्तिर्वः श्रेयसीत्याहातो मस्करी परिव्राजकः Bhāṣhya, II. 96). We have no doubt that Patañjali's reference to the philosophy of non-action as taught by Maskarī makes him identical with the great teacher Makkhali Gośāla. He was a Determinist who ascribed every cause to Fate or Destiny (*niyati*). He held that the attainment of any given condition or character does not depend either on one's own acts, or on the acts of another, or on human effort. There is no such thing as power or energy or human strength and vigour. All beings are bent this way and that by their fate. In his system chance has no place (*yadṛich-chhā*), but every thing is ordained by an immutable Fate (*niyati*) (*Dict. of Pali Proper Names*, II. 398). According to the Buddhist books Makkhali was considered by the Buddha as the most dangerous of heretical teachers.

This identification of Maskarī with the founder of the Ajivika sect is of great importance for the relative chronology of Pāṇini himself. There is one more evidence in the *Ashtādhyāyī* which supports the assumption of Pāṇini's knowledge of the philosophical school to which Makkhali belonged. Pāṇini refers to three kinds of philosophic beliefs (*mati*), viz. *Āstika*, *Nāstika* and *Daishṭika* (IV. 4. 60). Pāṇini's *mati* corresponds to *ditṭhi* of Buddhist works signifying a philosophic doctrine. The *Āstika* philosophers were those whom the Buddhist books call *Issarākāraṇavādi* or the theists who held that every thing in the universe originated from the

Supreme Being (*ayam loko issaranimmito*) (Mehta, *Pre-Buddhist India*, p. 333). The Nāstika philosophers correspond to those who are called *Natthikadiṭṭhi* in Buddhist works (*Bhandarkar Com. Vol.*, p. 330, C. D. Chatterji, *A Hist. Character in the Reign of Asoka*). These included the Annihilationist school of another great teacher Ajita Kesakambali (*ito paralokagatānām n' atthi, ayam loko ucchijjati*, Jāt. V. 239). This was a materialistic doctrine famous as the Lokāyata school. The third category of thinkers who are mentioned as Daishṭika by Pāṇini certainly refers to the followers of the determinist philosophy preached by Makkhali Gosāla who repudiated the utility of *karma* as a means of directing the lot of human beings.

In the canonical scriptures of the Jains, Maṅkhali Gosāla has been mentioned as Gosāla Maṅkhaliputta (*Uvāsagadasāo*, Hoernle, p. 97), while in the Sanskrit Buddhist texts he figures under the name of Maskarī Gosāliputra (*Divyāvadāna*, p. 143) (Chatterji, op. cit. p. 331, who concludes that Makkhali was undoubtedly a Maskarī ascetic). It must be added that the views of this teacher were not unknown in the Brahmanical literary tradition as is shown by the mention of the views of a teacher called Maṅki who discarded the doctrine of energism (*paurusha*), advocated a belief in destiny alone (*Suddham hi daivamevedam haṭhe naivāsti paurusham*) and preached *nirveda* (cf. the doctrine of *śānti* attributed to Maskarī in the Bhāshya), as the best policy (*Śāntiparvan*, chap. 177, verses 1-14). As Mr. Chatterji has shown there were various traditions about the accurate form of Gosāla's name, Maṅkhali was the form according to the Jaina Prakṛit and a tradition in the Bhagavatī Sūtra makes him the son of a mendicant or 'begger' (*maṅkha*, Bhag. Sūtra XV. 1). There can be no doubt that the form Maṅki as given in the Mahābhārata represents nothing else but the name of Maṅkhali Gosāla. Pāṇini explains Gosāla as the epithet of one 'born in a cowshed' (sūtra IV.

3. 35.) which accords with the traditional explanation of this part of Maṅkkhali's name.

### *Śramaṇa.*

Pāṇini refers to *Śramaṇas* in the sūtra *Kumāra śramaṇādibhiḥ* (II. 1. 70) which is interpreted as referring to *kumārī śramaṇā*, i.e., a virgin who is a *śramaṇa* nun. It is a Karmadhāraya compound. In effect the phrase denoted an unmarried woman who instead of choosing the path of householder's life entered the order of Śramaṇa ascetics. This sūtra is connected with another in the *Ashtādhyāyī*, viz., *Kumāraścha* (VI. 2. 26) which regulates the accent of the word *kumāra* in such compound words as *kumāra-śramaṇā* and others of this class. The group also includes *kumāra-pravrajitā* and *kumāra-tāpasī*.

It is of special importance to determine the religious affiliation of the Śramaṇa monks. Patañjali makes a statement that the Śramaṇas and the Brāhmaṇas belonged to different religious groups whose antagonism was of a permanent nature (*Yeshām cha virodhaḥ śāśvatikaḥ*, Pāṇini II. 4. 9, *ityasyāvākāśaḥ*, *Śramaṇa-Brāhmaṇam*, Bhāṣya, I. 476 on sūtra II. 4. 12). It shows that the term Śramaṇa denoted the non-Brahmanical ascetics in the time of Patañjali.

This view of Patañjali is borne out by the unanimous testimony of the Buddhist literature in which the Brāhmaṇas and Śramaṇas are always placed under different camps. There is no doubt that in the oldest Śrauta-sūtra literature the meaning of Śramaṇa is an ascetic in general, for example, in Baudhayana a *muni* is described as *śramaṇa* and asked to offer *puroḍāśa* to Agni standing knee-deep in the waters of the Sarasvatī (Baud. Ś.S. XVI, 30 ASB, edit. p. 276). Another passage of the *Ādiparvan* (Critical Ed 206. 3) which mentions the forest-dwelling Śramaṇas following Arjuna in the initial stages of his wanderings, leaves the question open. But if we

turn to the Buddhist books the Śramaṇa is always a non-Brahmanical ascetic and in most cases a Buddhist monk. The Alābu king addresses the Bodhisattva as Samana (Jāt. III. 40). The Udāna says that there were very many and various sectaries of Śramaṇas and Brāhmaṇas, all Parivrājakas, followers of different *Diṭṭhis*, i.e., Darśanas or Systems, and organisations (*sambahulā nānā-tiṭṭhiyā Samana-Brāhmaṇā paribbājakā nānādiṭṭhikā nānā diṭṭhi nissayanissitā*, P.T.S. edition, p. 66-67). The Aṅguttara (IV. 35) mentions two classes of ascetics whom it calls Parivrājakas, grouped into (1) Brāhmaṇas and (2) Annatitthiyas, i.e., other non-Brahmanical ascetics. The Greek writers also speak of the Śramaṇas as non-Brahmanical ascetics. According to another principle of division Strabo notes two sects of philosophers, one of which he calls the Brāhmaṇas and the other the Garmanes (Strabo, XV. 1.59) McCrindle remarks that the word Garmanes is beyond question an erroneous transcription for Sarmanes, which represents the Sanskrit Śramaṇa (McCrindle, 1901, p. 65, footnote). By the time of Asoka the term Śramaṇa was exclusively used for Buddhist monks or Bhikshus. What may be definitely stated about the pre-Asokan period is that the word Śramaṇa was applied to all ascetics other than those following the Brahmanical systems of thought. Schwanbeck supported the view that the Sarmanes of Megasthenes were Buddhist (McCrindle, 1901, p. 65, footnote). Bevan goes to the other extreme when he says that the description of Megasthenes 'applies to Brahmin ascetics rather than to Buddhists.' (C.H.I., I. 420). The correct position seems to be as suggested by the Buddhist works, viz., that the philosopher ascetics were of two classes, Brāhmaṇas and Annatitthiyas. Leaving aside the Brāhmaṇas (cf. the compound expression Śramaṇa-Brāhmaṇa), the Śramaṇas stand for the rest of the religious monks. According to the Greek writers also the Śramaṇas included more than one denomination, e.g., the Hylobioi were



one class of them : 'Of the Sarmanes the most honourable he (Megasthenes) says, are those called Hylobioi,' (Strabo, *ibid*, p. 67). The Śākya monks or the followers of the Buddha who are often mentioned with the Ajīvikas were of course another. The word Hylobioi has baffled correct restoration. Prof. C. D. Chatterji takes them to be Ajīvikas. This would make the followers of Gosāla one class amongst the Śramaṇa mendicants. Megasthenes as reported by Strabo, after mentioning the lower order of Śramaṇa monks who profess divination, says : 'Others again there are of a higher and finer sort, though even these will allow themselves to make use of popular ideas about hell, of those ideas at any rate which seem to make for godliness and purity of life.' (C.H.I., I. 420). It appears that these Śramaṇas of a higher and finer sort were in reality the Buddhist monks. The account of their belief in '*popular ideas about hell, of those ideas at any rate which seem to make for godliness and purity of life*' is a clue to their identification, since the Buddhist books frequently describe the horrors of hell as a deterrent from sin and the glories of heaven as a persuasive argument to draw people to a religious life.

The Greek account of the divisions of Śramaṇa monk closes with the statement : 'In the case of some Sarmanes, women are also permitted to share in the philosophic life, on the condition of observing sexual continence like the men' (C.H.I., I. 420). This statement about women being admitted to the Śramaṇa order of monks and taking the vow of celibate life, confirms the statement of Pāṇini about *kumārī* or unmarried women joining the order of the Śramaṇa monks. It is known that Gautama Buddha had lifted the ban on women joining the Saṅgha. In the Brahmanical books this privilege is not extended to women who are allowed to enter only the Vānaprastha order with their husbands. The practice of initiating women into *pravrajyā* was strictly forbidden by Kauṭilya (*striyam cha pravrajayataḥ*, Arth. II.

1), who also penalises the feasting of Śākya and Ajīvika monks at a *yajña* or *śrāddha* ceremony (Arth. III. 20). The indication therefore is that the entry of unmarried women into the ascetic order presupposed by Pāṇini's term *kumārī-śramaṇā* was a typically Buddhist institution.

Pāṇini also refers to the monk's robes as *chīvara*. It appears as the denominative root (*nāmadhātu*) *saṃchīvara-yate*, 'he dons the robe, i.e., assumes the role of a monk. (III. 1. 20). In the Jātakas the word *chīvara* is applied only to monk's dress (cf. *tichīvara*, Jāt. III. 471; *paṃsukūla chīvara*, Jāt. IV. 114).

Pāṇini derives the word *Arhat* to denote a specially praiseworthy person (*Arhaḥ praśaṃsāyām*, III. 2. 133). The state of being an *Arhat* was noted as *ārhanṭya* (*arhato num cha*) (V. 1. 24, *gaṇa-sūtra arhato num cha*).

It appears that the word *yāyāvara* (III. 2. 176) 'one in the habit of wandering' also denoted a wandering class of mendicants, mentioned in the Baudhāyana Dharmasūtra.

#### 4. RELIGIOUS PRACTICES AND BELIEFS.

Religious practices of greater import such as the performances of *yajñas* and the worship of gods have been described above. Domestic rites of lesser importance are also alluded to in the Asṭādhyāyī, for example, the Chāṇḍrāyaṇa vow (V. 1. 72), and the practice of religious recitation (*japa*, I. 2. 34) are mentioned. One who took the vow of silence was called *vāchaṃyama* (III 2. 40) and one who took the vow to sleep on hard ground as part of his discipline (*vrata*) was called *sthāṇḍila*, an epithet applicable to a *Brahmachārī* or a *bhikṣu* (IV. 2. 15). One who performed silent *japa* as a habit of life was known as *jañjapūka* (III. 3. 166). But Pāṇini also refers to the practice of *japa* being improperly followed

(*Bhāvagarhāyām, jañjapyate*, III. 1. 24). Reference is also made to the offering of *bali*, probably to various minor classes of deities (II. 1. 36). Patañjali refers to *Mahārāja-bali* offered to the Mahārāja class of deities or the Lokapālas. Special food articles selected for preparing *bali* were known as *bāleya* (V. 1. 13).

### *Śrāddha.*

Reference has already been made to the fire *Kavya-vāhana* (III. 2. 65) which was used at the *śrāddha* ceremony. The Pitṛis or the manes are mentioned as *devatā*, deities for whom oblations were made (IV. 2. 31, *Pitriya* under the context *Sāsya devatā*). The great *śrāddha* ceremony held in the Śarat season (the *Pitṛipaksha* in Āśvina) has been mentioned as *Śaradika śrāddha* (IV. 3. 12). One who had dined at a *śrāddha* was distinguished as *śrāddhī* and *śrāddhika* (भाद्रमेन युक्तम् V. 2. 85). Kātyāyana informs us that this epithet was applied to the Brāhmaṇa only on that particular day (II. 389). The necessity for this qualifying word seems to have arisen from the fact that the *śrāddha-bhojī* was required to perform the necessary expiation for his spiritual purification on that same day. For example a *śrāddhika Brahmacārī* would be distinguished as such from his other class mates because his attendance at lessons would be waived on that day in order to enable him to perform the necessary *japa*.

Religious tonsure was also in vogue (*madrāt parivāpane*, V. 4. 67), the tonsurer was known as *madrakāra* or *madrakara* (III. 2. 44).

### *Popular Beliefs.*

Belief in divination from bodily signs is definitely mentioned in sūtra III. 2. 52 (*Lakṣaṇe jāyā-patyosh tak* as read with III. 2. 53) in which the marks on the body of husband or wife are interpreted in relation to their effects on each other. Numerous references to *Āṅgavidyā* (divination from bodily signs) are found in Buddhist and

Jaina works. Reference is also made to *vipraśna* or interrogating a foreteller about the future good luck of a person; the sūtra (*Rādhikshyoryasya vipraśnaḥ* (I. 4. 39) seeks to regularize the linguistic form of the expression in this connection, e.g., *Devadattāya Ikshate*, 'He is considering the future of Devadatta.'

Belief in the efficacy of mantras to captivate the heart of others is shown by the reference to *vaśīkaraṇa mantras* known as *hṛīḍya* (*hṛīḍaya-bandhana mantra*, IV. 4. 96). The idea of the auspiciousness of certain days and nights was also developed and they were distinguished from others as *punyāha* (V. 4. 90) and *punyarātra* (V. 4. 87). Kātyāyana devotes a vārttika to the mention of lucky recitations under the name of *punyāhavāchana* (V. 1. 111). The idea of *pāpa* and *punya* arising out of human actions was fully developed (*saptamyāḥ punyam*, VI. 2. 152), *pāpa* and *punya* being conceived in relation to evil and good actions, and the doers thereof designated as *pāpakṛit*, *punyakṛit*, *sukaramakṛit* (III. 2. 89). Transgression of right moral conduct is referred to as *kshiyā*; such lapses were expressed by special linguistic forms, firstly by using the exclamatory particle *ha* (VIII. 1. 60), and secondly by pronouncing the verb with the *pluta* accent (VIII. 2. 104). The recognition of such heinous crimes as *bhrauṇahatya* (VI. 4. 174) and *Brahmahatyā* (III. 2. 87) must have been accompanied by proper expiatory penances.

On the other hand moral virtues were looked upon with due honour. A person who was self-controlled in body and mind was called *samī-damī* (III. 2. 142) or *dānta-śānta* (VII. 2. 27). Cardinal moral and spiritual qualities such as *prajñā*, *śraddhā*, *tapa*, *tyāga*, *viveka* and *dharma*, are referred to. These were significant virtues and their acceptance as elements of an ideal moral life constitutes an important chapter in the history of Hindu ethics. The ideal of moral perfection unfolded by Vālmīki in the case of Rāmā in the first chapter of the Rāmāyaṇa is

a standard code of moral and physical virtues. Ethical progress in its early stages conformed to this simple but vigorous pattern.

The performance of *Ishta* and *Pūrta* was a matter of some consequence earning the social distinction of *ishṭī* and *pūrtī* (V. 2. 88). Those who had faith in the religious efficacy of gifts and endowments dedicated a portion of their wealth for the fulfilment of *dharma*. This procedure known as *upayoga* (I. 3. 32) and *vyaya* (I. 3. 36) was suitably expressed by linguistic forms taught in the sūtras, as *sahasraṁ prakurute*, *sahasraṁ vinayte*, 'he endows or earmarks for religious purposes a thousand rupees.'

### *Dharma.*

The word *dharma* has a three-fold sense in the *Ashtādhyāyī*. Firstly it retains its primary meaning of custom or what the law-books prefer to call by the name of *śhāra*, as the *Kāśikā* explains in sūtra IV. 4. 47. That which was in accordance with custom was called *dharmya* (IV. 4. 92, *dharmādanapete*). In this sense Pāṇini uses *dharmya* to indicate the customary dues which were realized in certain transactions (VI. 2. 65, cf. *Kāśikā dharmyam ityāśhāranīyatam deyamuchyate*). Even the charges levied as toll-tax are called *dharmya* because the sanction of custom regulated such payments, and not the secular authority of a king. The other meaning of *dharma* is religious merit or virtuous conduct, as in the expression *dharmam charati dhārmikah* (IV. 4. 41). The third meaning of *dharma* has reference to the *Dharma-sūtras* which were the products of the various Vedic school चरणोभ्यो धर्मवत्, IV. 2. 46).

## 5. PHILOSOPHICAL THOUGHT

### *Intellectual Ferment.*

The philosophic thought of ancient India in the period from about the seventh century B.C. was marked

by a new awakening and upheaval unprecedented in its history. It led to the foundation of various schools centering round different doctrines as to the ultimate cause and nature of the world and soul. The atmosphere was charged with a keen intellectual ferment as if a new god of wisdom had stepped in to preside over the times. We trace this deity aptly called *Jñā*, in the Śvetāśvatara Upanishad, which preserves on the Brahmanical side the best record of the intellectual unrest of which the Buddhist literature presents a graphic picture (Śv. Up. VI. 16-17). Pāṇini also mentions *Jñāḥ* (III. 1. 135) as an independent term signifying 'One who knows'. It appears that the monosyllabic *Jñā* represented in the completest manner the ideal of the Sophistic movement characteristic of Indian philosophy from the time of the Upanishads which found its maximum eloquence in the time of Buddha and Mahāvīra. It is to the intellectual traditions of this epoch that we may trace such, otherwise queer, expressions as *Jñānām Brāhmaṇānām apatyam*, a descendant of those Brāhmaṇas who professed to know and who shared in the sophistic ferment, (Bhāṣya II. 190). Patañjali, too, refers to this deity of thought as *Jñā devatā* to whom honour was bestowed by householders cooking a special *sthālīpāka* (*Jñā devatāsyā sthālīpākasyā Jñāḥ sthālīpākāḥ*, Bhāṣya, III. 232). Pāṇini refers to a philosophical doctrine promulgated by a thinker as *matī* (IV. 4. 60) and the means of knowledge as *matya* (*matasya karaṇam*, IV. 4. 97).

### *Various Schools.*

Pāṇini classifies the views of various philosophical thinkers under three categories according to the basic point of view implied in their teachings. They were *Āstika*, *Nāstika* and *Daishṭika* (अस्ति नास्ति दिष्टं मतिः IV. 4. 60). A list of the principal philosophic doctrines or *matīs* is preserved in the Śvetāśvatara Up. (I. 2). At the head of the list appears *Kāla* or Time as the cause of the world

corresponding to *Kālavāda*, the doctrine of Time of the Buddhist literature as presented in the *Mūlapariyāya Jātaka* (II. pp. 260-1). It is highly elaborated in the *Mahābhārata* (Āśvamedha 44, cf. Mehta, *Pre-Buddhist India*). In Pāṇini's own view the time-denoting words had attained the status of a *devatā* fit to be worshipped (IV. 2. 34), and star-names and seasons were similarly deified. Next in the list is *svabhāva*, a view which had its counterpart in the Buddhist *Akiriyā-vāda*, i.e., the view of Non-causation. *Yadṛichchhā* or the view of fortuitous origin was represented by the *Ahetuvādins* who put forward the hypothesis of chance. The *Niyativāda* or the Fatalist doctrine corresponds to the Determinist school advocated by Makkhali Gosāla. The view of the *Bhūtas* (the four material elements) creating the world was represented in the Materialistic doctrine of the *Lokāyata* school whose materialism was represented by the followers of the Annihilationist school, (the Uchchedavādins). *Yoni* or the privileged incidence of birth as the one root-cause directing the world of men and animals was probably represented by the Militarist doctrine (*Khattaviḍḍhāvāda* Jāt. V. 240) which believed in the efficacy of power-politics to rectify human ills. Lastly the *Purusha* or *Devamahimā* as the sole cause of the universe is represented in the Jātaka by *Issarakāraṇavāda* (Jāt. V. 238). The author of the Śvet. Up., who is an advocate of *Purushavāda*, refers to the other schools of thinkers, like the advocates of *Svabhāva* and *Kāla*, as *parimuhyamāna*, or heretical views conflicting with the true faith.

This enumeration of philosophical schools in an Upanishad and the Mahā-Bodhi Jātaka (V. 228, ff. Jāt. No. 528) is very remarkable and the chief amongst them can be traced in the Aṣṭādhyāyī. For example, the *Āstika-vāda* is the Theistic school of *Purusha* or *Issarakāraṇavāda*. We know that the orthodox or the Brahmanical thought lent its greatest weight in support and exposition of this school of which the climax was reached

in the Vedānta sūtras. Fortunately Pāṇini also mentions by name the Bhikshu-sūtras of Pārāśarya (IV. 3. 110) which apparently was the name of the earliest Vedānta treatise written in sūtra form. It is possible that a few modifications were subsequently made in the original text, but that the nucleus certainly existed in Pāṇini's time cannot be disputed. The *Purusha* or *Adhyātma* school ultimately absorbed other minor doctrines of *Prāṇa*, *Jyoti*, etc., as the supreme cause by evolving a synthesis of all causes in *Purusha*. In course of time other views of matter and the world aligned themselves with that one view so that the doctrine of *Āstikavāda* became synonymous with a host of orthodox schools.

Pāṇini's *Nāstikamati* similarly represents the views of those who were opposed to the school of *Purusha*. They comprised philosophers of various denominations, such as the believers in *Svabhāva* (Non-causationists), *Yadṛichchhā* (Fortuitous Originists, *Ahetuvādins*), *Bhūtas* (Materialists of which Ajita Kesakambalin was the famous exponent) and *Niyati* (Determinists). Of these *Nāstika* schools Pāṇini has specially noted the name of Maskarī (Makkhali Gosāla) and *Dishtamati* or the view of *Niyati* which as we have discussed above was based on the repudiation of the efficacy of actions (*kiriya*) and human endeavour (*viriya*). His followers were the *Daishṭikas* or the Determinists.

### *Lokāyata.*

The name of this school which upheld the theory of elements as the prime cause (*Bhūtavāda* and *Uchchhedavāda*) is not found in sūtra proper but occupies the second place in the Ukthādigaṇa (IV. 2. 60) by which a teacher and a pupil of this doctrine were both known as *Lokāyatika*. There is a strong probability that the name *Lokāyata* in this group was read by Pāṇini himself and that the exponents and followers of this school were known to him. Kauṭilya refers to the *Lokāyata* school (*Arth.* p. 6).



Its antiquity is also shown by a reference in the *Dīghanikāya* and the mention of a Brāhmaṇa well-versed in Lokāyata doctrine asking the Buddha a series of questions (*Samyuttanikāya*, DPPN, II. 787). In a Jātaka we find reference to the Lokāyatika doctrine (*na seve Lokāyatikam*, VI. 286). The Kāmasūtra quotes two wordly-wise sayings of the *Lokāyatikas*, वरं सांशयिकान्निष्का दसांशयिकः कार्वाण and वरमद्य कपोतः श्वो मयूरात्, (Kām. 1. 2. 30), which is equal to 'A bird in hand is worth two in the bush'. There is an interesting reference in Patañjali, *Varṇikā Bhāgurī Lokāyatasya*, i.e., a specimen of the Lokāyata (doctrine) is the view of Bhāguri (Bhāshya, II. 325; VII. 3. 45) which shows that Bhāguri was a famous exponent of the Lokāyata school. (Cf. also *vartikā Bhāgurī Lokāyatasya*, i.e., the Lokāyata way of life is that of Bhāguri, III. 326). It appears that the name of Chārvāka, the founder of the Lokāyata school, had been incorporated in grammatical literature to illustrate the dialectical methods of 'detailed exposition' (*jñāna*, I. 3. 46), and 'vindication' of the doctrines of a philosophical school (*sammānana*, I. 3. 36, *Kāśikā* and *Chandra* 1. 4. 82). Chārvī or Chārvāka does not seem to be a proper name but an epithet derived from his eloquence. In the Mahābhārata Śāntiparva a friend of Duryodhana is termed *Lokāyatika*, and similarly in the Rāmāyaṇa Jābali, a councillor of Daśaratha, was a believer in the Lokāyata philosophy. It will appear that the Lokāyata school was a well-known early school of Indian philosophy which developed as the most dominant representative of the heretical views or *Nāstika Mātī*. Its existence in the time of Pāṇini may be taken for granted.

Of the other systems of philosophy there is no definite evidence in Pāṇini, although we find mention of *yama*, *niyama*, *saṃyama* (III. 3. 63), *yogī* (III. 2. 142), as terms familiar in the Yoga school; *nigrihyānuyoga* (VIII. 2. 94), the same as *nigraha* (Nyāya, I. 2. 19; V. 2. 1) and *anuyoga* (Nyāya, V. 2. 23), defeat and censuring of an opponent in Nyāya dialectics; and *parimaṇḍala* (VI. 2. 182) which is

the word for atom used in Vaiśeṣika terminology (Kaṇḍa, VII. 1. 20). But these stray words most probably formed part of the general stock of Indian philosophical vocabulary in Pāṇini's time.

#### *Philosophical Terms—Soul.*

The proper philosophic term for self was *ātman* in such words as *ātmaprīti*, *ātmamāna* and *ātmanīna* (*ātmane hitam*, V. 1. 9). *Sva* also denoted *ātman*. *Jīva* in such terms as *jīva-nāśam naśyati* (III. 4. 43) means 'life.' The distinction between *kshetra* (V. 2. 92) and *kshetrajña* (VII. 3. 30) seems to have been clearly grasped. The older word *akshetravid* (Rigveda, X. 32. 7, *akshetravit kshetravidam hy-aprāt*) is represented by the new word *akshetrajña* and the state of being ignorant of the mystery of the self and its field, the body, was denoted by the special word *akshaitrajñya* (VII. 3. 30). A living being including both human and animal, is referred to as *prāṇa-bhṛit* or *prāṇin*, the plant kingdom being excluded from this category (IV. 3. 135). Living beings (*chittavat*) were also distinguished from the inanimate kingdom by the possession of *chitta* (I. 3. 88; cf. also *achitta* IV. 2. 47). Mind or *manas*, was also called *svānta* (VII. 2. 18). Kātyāyana in one place raises the doctrine of *sarva-chetanāvattva* (II. 15; III. 1. 7) implying that in the higher philosophic sense which may also influence grammatical operations the distinction of animate and inanimate beings does not exist. Pāṇini, however, seems to have taken a more practical view. Patañjali is probably referring to old definitions when he advocates the view of the two-fold nature of *ātmā*, viz. *śarīrātmā* and *antarātmā*, (II. 88). He adds that our physical being (*śarīrātmā*) acts and the effect of pleasure and pain is felt by the *antarātmā*, and that our mental being acts and the effects of pleasure and pain (*sukha* and *duḥkha*) are felt on the physical plane by our body. Pāṇini also refers to pleasure felt by the physical body of the doer (*kartuḥ śarīra-sukham*, III. 3. 116) and also to

the mental feeling of pleasure and pain (III. 1. 18, *sukha-vedanā*). Pleasure is defined as connected with *ānulomya* feeling (V. 4. 63) and pain with *prātilomya* (V. 4. 64) which is almost identical with their definition in philosophical works. The statement *Svatantraḥ kartā* (1. 4. 54) enunciating a sound grammatical position must have been inspired by the metaphysical theory of the free will of the agent of action.

### *Indra and Indriya.*

Indra as the husband of Indrāṇī was the great Vedic deity receiving homage in the *yajñas*. This meaning is retained in the *Ashṭādhyāyī* and some of his synonyms as *Mahendra* (IV. 2. 29) *Marutvān* (IV. 2. 32), *Maghavan* (VI. 4. 128), *Vṛitrahan* (III. 2. 87) are mentioned. But what is important is a new metaphysical meaning of the word Indra as a name of the human self (V. 2. 93). This signification had evolved in the religio-philosophical cogitations of the Brāhmaṇas where the *adhyātma* interpretations engaged the chief attention. Pāṇini connects *Indriya* with *Indra* in five defining clauses of equal rank and ultimately makes provision in the formula *iti vā* for all other views about the relationship of the Self (*Indra*) with the senses (*Indriyas*). Yāska who most probably preceded Pāṇini gives evidence of extensive discussions about the derivation of Indra in which such great teachers as Āgrāyana and Aupmanyava had participated. The fifteen different etymologies of Indra compiled by Yāska (*Nirukta*, X. 8; cf. The *Nirukta* by H. Sköld, p. 210), must have been taken from the different Brāhmaṇa and Āraṇyaka passages some of which can still be identified (see my article, *Studies in the Grammatical Speculations of Pāṇini*, JUPHS, April, 1936, pp. 95-104). Some are definitely implied in the etymologies recorded by Pāṇini as examined below.

(1) *Indra-lingam*. The senses are said to be a symbol of Indra. The *Kaśikā* says, 'Indra is Ātmā or the human

Self'; and the meaning goes back to the Maitri. Up. VI. 8. When the senses function we infer the existence of Indra inside the body. According to Śatapatha it is Indra that makes the organs beat with life (VI 1. 1. 2). The opening lines of the Sixth Book of the Śatapatha say, 'Verily, in the beginning there was the Asat named the Rishis, who were doubtless the vital airs, Prāṇāḥ. The invisible Prāṇa incarnated in the body; he is Indra, propelling by his power the senses which thereby stand as proof of his existence'. Thus the functioning senses are made the visible symbols of life within (*Indra-lingam*).

(2) *Indra-dṛishṭam*. The senses were literally so called because they were *seen* by Indra. Yāska ascribes this opinion to Aupamanyava (*Idam darśanāt iti Aupamanyavaḥ*). This is the view embodied in the Aitareya Aranyaka (*Idam adarśam tasmād Indra nāma*, III. 14). This Aupamanyava was a grammarian who is mentioned by Yāska as disagreeing with the onomatopoetic theory of the derivation of names (III. 18) and it is possible that Pāṇini was indebted for this etymology to Aupamanyava. *Idam* in the above two sentences denotes the non-self or the senses.

(3) *Indra-sṛishṭam*. In this view the senses were created or produced by Indra as the Self. Yāska attributes this view to the teacher Āgrāyaṇa (*Idam karanāt iti Āgrāyaṇaḥ*, X. 8.), and a similar suggestion is put forward by the Aitareya Up. (II 1, *Tā etā devatāḥ sṛishṭāḥ*).

(4) *Indra-jusṭam*. The senses are so called as they are loved by Indra who is delighted in their company. The *Indriyas* are the receptacles of Soma which is Indra's delightful drink. According to Aitareya Br. (II. 26) the senses are the cups of Soma (*Soma-graha*), and since Indra loves his sweet mead he is never so happy as when he is in the company of the senses (cf. Indra as *indau ramate*, Nir.). The epithet *Indra-jusṭa* seems so appropriate in view of the close accordant relationship between the self and the senses.

(5) *Indra-dattam*. The senses were directed by Indra to the respective objects of enjoyment allotted to each of them (cf. Kāśikā, *atmanā vishyebhyo dattam yathāyatham grahanāya*). Here the allusion is to the Aitareya Up. where the Creator is described as distributing functions and stations to the cosmic deities in the microcosm of the human body (*purusha*). 'He bade them, please find your respective places. Being so ordered they entered the human body'. Because this wonderful ingredience of the cosmic powers inside the human body was realised by the stern dispensation of *Atman* or Indra the senses were naturally looked upon as *Indra-datta*, which is almost Pāṇini's paraphrase of the Upanishadic legend.

(6) *Iti vā*. This part of the sūtra is like an unknown quantity and puts the grammarian's seal of approval on such other derivations as were taught by ancient teachers but not included in the above five. The Kāśikā brings out the spirit of the words by the remark that the word *iti* implies the *manner* of derivation, and other suitable etymologies are also permitted and each one of those shown by Pāṇini is of equal rank. Incidentally it must be noted that the formula *iti vā* bears eloquent testimony to the synthetic spirit in which Pāṇini conceived his great work.

### *Next World.*

It appears that a belief in the other world and the continuity of Self in after life was a moving force in the lives of the people who strove by various means to ensure success in *Paraloka* (VI. 1. 49, *Sidhyater-apāralaukike*). The sūtra *Lipsyamāna-siddhau cha* (III. 3. 7) refers to the attainment (*siddhi*) of things highly coveted, which is stated to be *Svarga* in the commentaries. The corresponding word in the Vedic literature was *Nāka* which was believed to be the highest region. The word *Nāka* is explained in the Brāhmaṇas (S. B. VIII. 4. 1. 24) as derived from *na*, 'not', and *aka* 'pain', because those who

go there are free from sorrow .(*Vedic Index*, I. 439). Yāska endorses this etymology and Pāṇini also agrees in splitting the world into *na* and *aka* (VI. 3. 75), thus retaining its association with a final abode of happiness as the heaven was believed to be in the earlier literature.

There are two other words which have some reference to the ultimate end of man. One is *Niśśreyasa* (V.4.77) which in the Upanishads denoted final bliss or beatitude enjoyed by the soul according to Brahmanical beliefs. The word *Nirvāṇa* (VIII. 2. 50) on the other hand denoted the sense of final extinction as that of a lamp or flame of fire. The commentaries include *Niravāṇo bhikṣuḥ*, 'the monk has entered the nirvāṇa state' as one of the illustrations to the sūtra, which would permit the inference that the nirvāṇa of Pāṇini was a philosophic term borrowed from the Buddhist ideology.







# PALACE-SCENES ON A MATHURA PILLAR IN THE LUCKNOW MUSEUM

BY

V. S. AGRAWALA.

A red sand-stone pillar in the Lucknow Museum (No. J. 533; ht. 4' 8½" × 10" × 11") unearthed in 1890 by Dr. Führer in the ruins of the Kankali Tila, Mathura, is worthy of special attention. It was published by Smith on Pl. XXVII of the *Jaina Stupa of Mathura* and also in the *Journal of Indian Art and Industry* for October 1893 (Pl. 86 of No. 44 of Vol. V), but without any explanation of the scenes depicted. From the cultural point of view the sculpture is a worthy document of the rich and picturesque life of the Kushāṇa period illustrating scenes of dance, music, sports, drinking and toilet past-times. Although the spiritual faith of the people was grounded in the teachings of the Buddha, Mahāvīra or Bhāgavata Vaiṣṇaism during the early centuries of the Christian era at Mathura, yet behind the religious façade we meet with a free and frank enjoyment of life in all its aspects.

The pillar is carved on the back and front-sides, each containing four superimposed panels. [Figs. 9-10.] The eight scenes taken together represent the palace-amusements (प्रासाद-विहार) of a young loving couple—in this case Nanda and his beautiful wife Sundarī, a suitable subject for poetic description and sculptural illustration. Aśvaghosha who lived in the reign of Kanishka (1st-2nd century A.D.) was deeply touched by the story of Nanda and his peerless wife and has immortalized the charm and pathos of their life in his poem, the *Saundara-nanda*. Nanda shut up in his palace and absorbed in love enjoyed and lived with his mistress like a *chakravāka* bird with its mate—

प्रासादसंस्थो मदनैक कार्यः प्रियासहायो विजहार नन्दः ॥४॥ १

स चक्रवाक्येव हि चक्रवाकस्तथा समेतः प्रियया प्रियार्हः ॥४॥ २



Fig. 1.—Prostration of the proud lady (मानापनीदन).

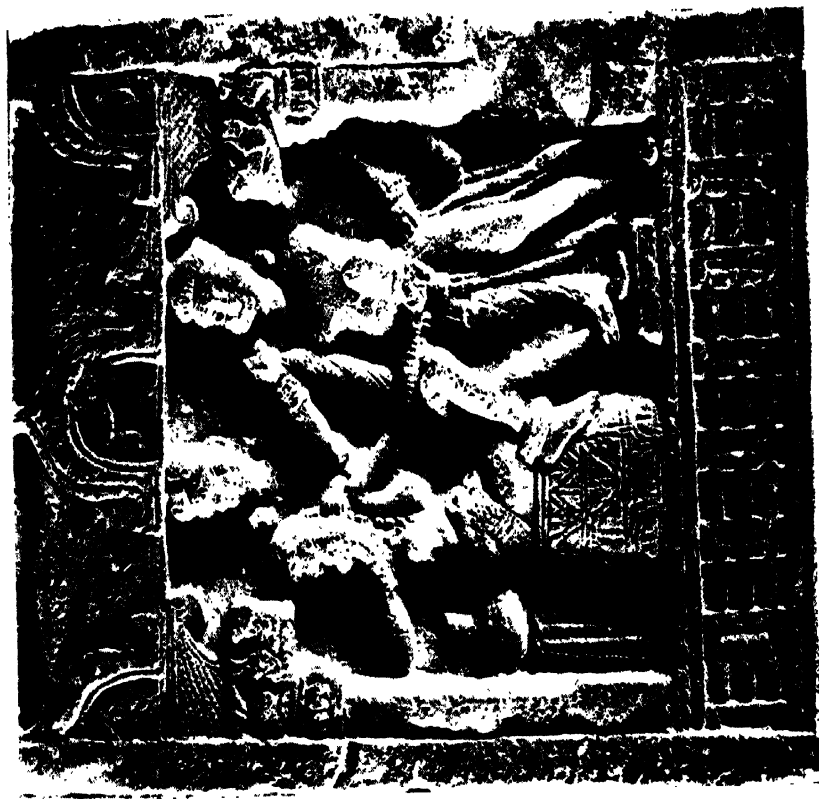


Fig. 2.—Sundari at toilet (सुन्दर)

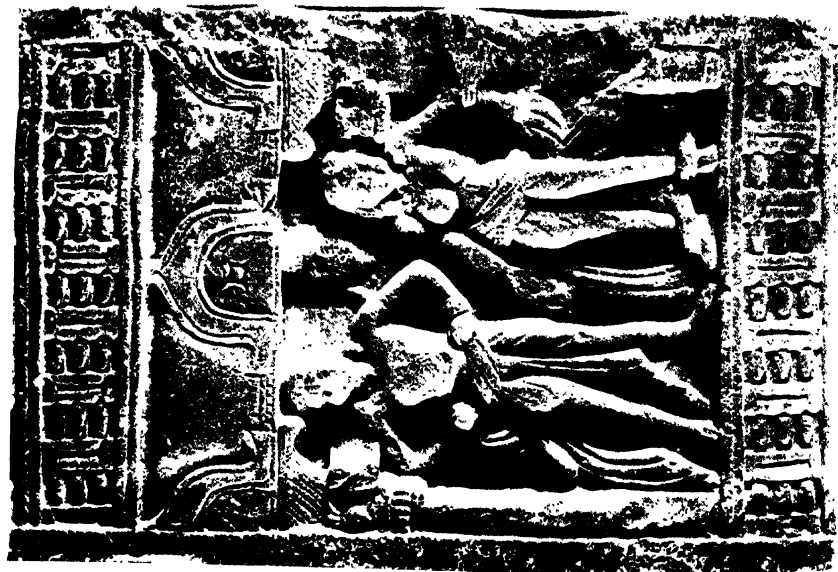
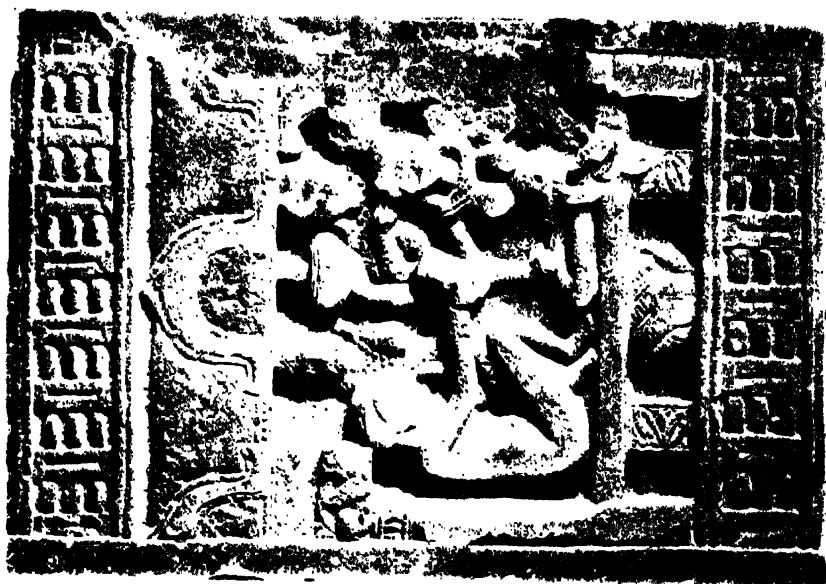


Fig. 3.—Dance. (Congo).



From the art point of view the pillar is a remarkable specimen of the Kushāṇa school of Mathura sculpture. The scenes are treated in a very simple and natural style and are full of vivid expression. The happy balance between the direct rendering of the subject-matter and the simplicity of execution as evident in this pillar was the hall-mark of the early Kushāṇa style.

### DESCRIPTION OF THE SCENES.

#### Front side.

*Scene 1.—Propitiation of the proud lady* (मानापनोदनः—Fig. 1). Āsvaghosha distinctly refers to Sundarī as a type of *māninī nāyikā* :

लक्ष्म्या च रूपेण च सुन्दरीति स्तम्भेन गर्वेण च मानिनीति ।

दीप्त्या च मानेन च भाभिनीति यातो बभाषे त्रिविधेन नाम्ना ॥

‘There were the names by which she was known—Sundarī on account of her majesty and beauty; Māninī for her obstinacy and pride; and Bhāminī for her radiant loveliness and high spirits.’ (*Saundarananda*, IV. 3).

The scene in this panel illustrates Nanda reconciling or propitiating his proud and spirited wife. Both are seated on a long bench. Sundarī’s head is turned away from Nanda and her back is turned towards him. The weight of her body rests on the right hand placed on the bench. The pose of the left hand shows that it was placed against her cheek or head. The left leg is placed on the right one as if interlocking and fixing it. Sundarī is wearing profuse armlets (*valaya*), heavy anklets (*nūpura*), a dhoti and a broad girdle over it. Under the bench is a garland basket (माल्य-चंगेरिका).

*Scene 2.—Toileting* (मण्डन, Fig. 2). Sundarī seated on a round cair of wicker work (*vetrāsana*) is holding a toilet-mirror in her left hand and painting her face with the right. A female attendant is standing at the back and is in the act of arranging her locks. Nanda is standing in front of her holding a lotus garland in

right hand. Behind the lady in a corner is a water jar placed on a high fluted stand.

*Scene 3.—Dance* (नृत्य, Fig. 3). Nanda and Sundarī are dancing together. A female attendant is standing in the background.

*Scene 4.—Drinking* (मधुपान, Fig. 4). Nanda and Sundarī seated together on a bench are enjoying intoxicating drinks. 'In the intervals of exhaustion the pair sportively intoxicated each other by way of mutual refreshment.' (कलमान्तरेऽन्योन्यविनोदनेन सलीनमन्योन्य ममी मदच्च, *Saundarananda*, IV. 11).

Nanda is holding the goblet between the fingers of his right hand and offering it to the lady. Sundarī is wearing a big garland round her neck and shoulders and grasping it with the left hand. Similar conspicuous garlands occur in other scenes at Mathura and are suggestive of special amorous moods. In the background are two female attendants, one of whom a *surāhārī* is bearing the wine-jar (*surā-bhāṇḍa*) in her left hand.

*Scene 5.—Music* (संगीत, Fig. 5). Both Nanda and Sundarī are seated on circular wicker stools facing each other. Sundarī is holding a *vīṇā* in her lap and playing on it. Her eyes are intently fixed on the instrument. Two female attendants are standing at the back.

*Scene 6.—Coiffure of the lady* (वेणीप्रसाधन, Fig. 6). Sundarī is standing in profile looking sideways. She is holding a mirror in right hand and is looking her face in it. With her left hand she seems to be painting her face, most probably the scene of painting tattoo marks (विशेषक रचना) to which reference is found in *Aśvaghosha* (*Saund.*, IV. 13, 20). Nanda is standing on the right side and is in the act of dressing her hair. He is holding her long braid (*veṇī*) in his left hand, and with the right he is lifting a garland from a basket supported on the head of a dwarf servant. On a railing pillar in the Mathura Museum (186) a similar scene is represented (*A Handbook of Sculptures in the Mathura Museum*, p. 40), and there also

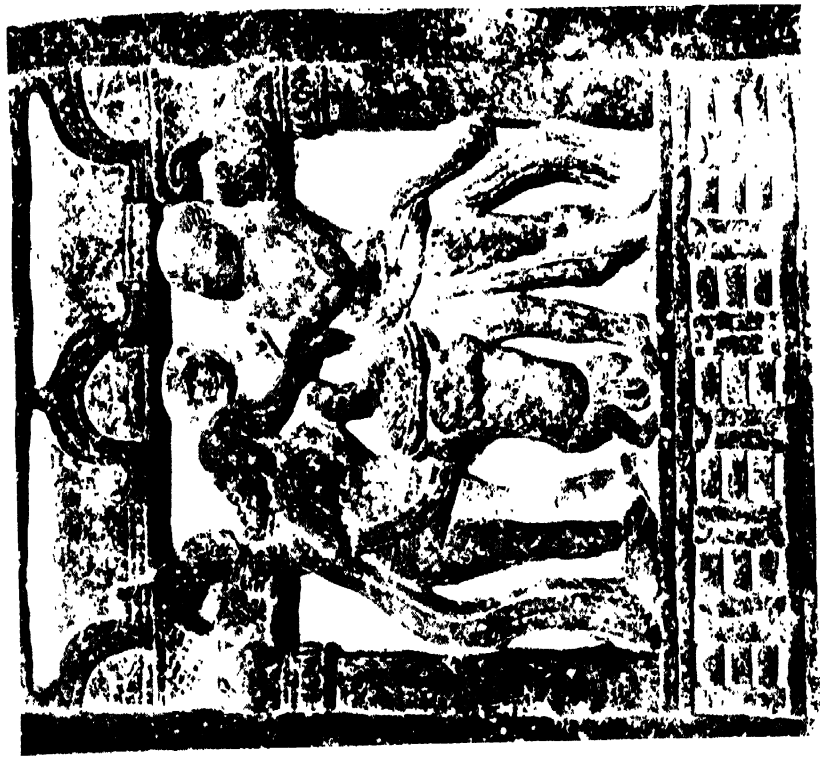


FIG. 6.—Dressing her hair (देवी-प्रसादन)

PLATE IV

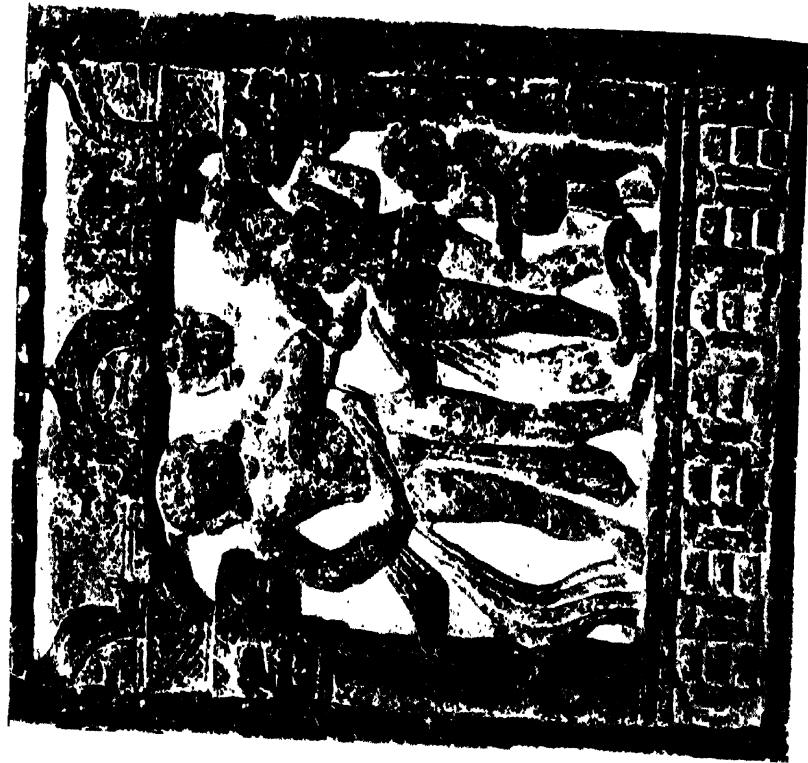


Fig. 8.—Dance (Dance).

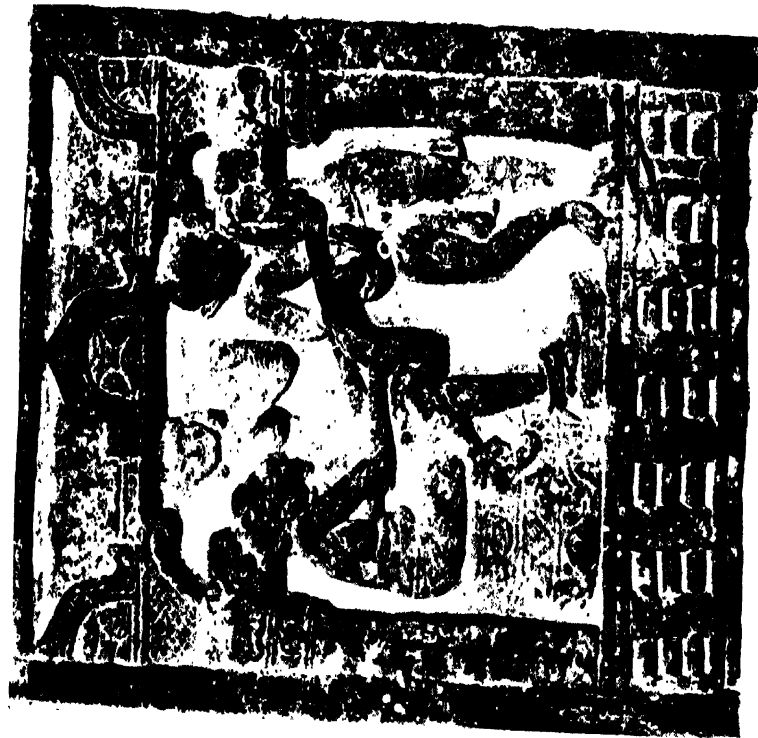


Fig. 7.—A Palace-amusement scene (अमल-महल-दृश्य).

it appears to be a scene depicting the love sports of Nanda and Sundarī. Aśvaghoṣa gives a detailed description of the facial decoration of Sundarī, but with this difference that in the poem Sundarī is said to have transferred the mirror to her husband whereas in the carved scene she is holding it herself. (Cf. Saund. IV. 13, 20).

*Scene 7.*—A palace-amusement scene showing a lady and a jester (उत्तरीयावर्कण, Fig. 7). Sundarī is seated on a *vetrāsana* with right leg placed on a foot-stool. In front of her stands a jester wearing a quaint skull-cap marked with a front knot or plume. From his shoulder hangs a scarf. The lady is pulling the scarf which the jester is holding against her. A female attendant is standing at the back. All the three figures are looking mirthful.

This was a favourite palace amusement in ancient India. Besides its artistic representation on this pillar and elsewhere literary reference to it is also found in the *Kādambarī* of Bāṇabhaṭṭa. A detailed description of a similar scene on a terracotta panel from Mathura was given by me in an article in the J.I.S.O.A., 1942, pp. 69-73. The inmates of the harem regaled themselves by practising such light jokes on the palace chamberlains (*kañchukī*), jesters (*vidūshaka*) and such other attendants (*cheṭa*, *viṭa*). The cap with a frontal plume and the conspicuous pricked ears projecting at right angles from the head are intended to emphasise the humorous character of the male figure who appears to be a *Vidūshaka*. The scene on this Kushāṇa pillar presents an earlier version of the scene on the Gupta terracotta panel, both from Mathura.

*Scene 8.*—*Dance* (रुक्म, Fig. 8). Nanda and Sundarī are dancing together. A female attendant is standing in the background and a dwarf by his side.

The discovery of a Buddhist pillar from the predominantly Jaina site of Kankali Tīla requires some explanation. Unfortunately there is no record left of the exca-



vations conducted by Dr. Führer in 1890—92, at this very important site, nor does it appear that the dig had any well-defined scientific purpose other than that of collecting mere stone antiquities. There is, however, a very strong Jaina tradition which records that the Buddhists for some time entered into a dispute with the Jainas for the possession of the Stūpa at the Kankali site, and that after about six months of controversy during which time the Buddhists appear to have remained strong the issue was decided by the king in favour of the Jainas. This tradition is preserved in the Vyavahāra-sūtra Bhāṣhya (V. 27-28), Brihatkathākosha of Harishena (931-32 A.D.), Yaśastilakachampū of Somadeva (959 A.D.) and the Vividhatīrthakalpa of Jinaprabha Sūri (1325—1351 A.D.) of which the Mathurāpurīkalpa gives a detailed account of the legendary history of the Jaina Stūpa. There is no doubt that originally the site was sanctified by the construction of a Jaina Stūpa. Subsequently when the spot gained in importance the Buddhists who were powerful at Mathura during the first and second century A.D. seem to have appropriated a portion of the site for building a monument sacred to their own religion. This temporary trespass by the Buddhists on an avowedly Jaina site explains in some manner the discovery of some Buddhist sculptures, amongst which the Nandasundarī pillar is one, from the site of the Kankali Tila.

PLATE V



Fig. 9.—Obverse

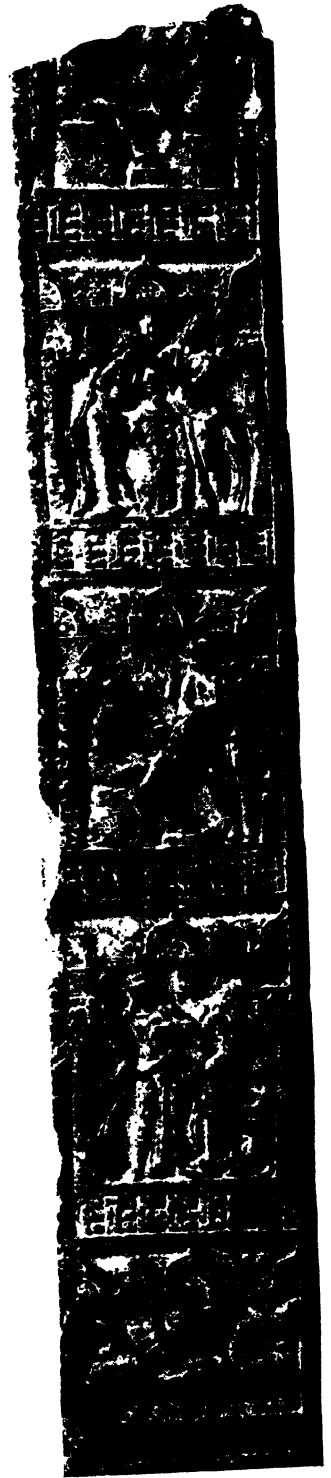


Fig. 10.—Reverse

Nanda—Sundari Railing Pillar from Mathurā.



## THE RAJGHAT HOARDS OF ŚRĪ-PRATĀPA COINS

BY DR. V. S. AGRAWALA, NEW DELHI.

At the time of my visit to Banaras in June, 1947, Śrī Murari Lal Kedia, the founder of the Ram Ratna Pustaka-Bhavana, brought to my notice the fact that in the Rajghat excavations carried on the outskirts of Banaras in 1940-41 three hoards of coins, all of Śrī-Pratāpāditya, were discovered. The first hoard consisting of about 1,000 coins was received by Mr. Kedia directly from the labourer, who had concealed it while digging on the previous evening and then removed the same early next morning. Out of this, 46 select coins are in the possession of Mr. Kedia; the rest were melted by him. The second hoard comprising five to six hundred coins was entirely melted by a relation of Mr. Kedia, no specimens being now available. The third hoard consisting of 269 coins came to Mr. Kedia by purchase from a local dealer named Sitaram of Thatherigali.

The available coins were shown to me for examination and I am illustrating the obv. and rev. of five of them on **Pl. IV A**. In the first hoard the coins show on the obverse the crude standing figure of the goddess with the legend *Śrī-Pratāpa* on right, and the letter *ke* on left. Two letters, *dāra*, it has been suggested, were engraved between legs, but they are doubtful. On the reverse is shown a crude figure representing king to left with hands lifted up and the name *Kedāra* vertically written on right, by the side of which are shown a crescent-topped pole and a cross with long arms (**Pl. IV A, 3**). On left is a vertical line of dots showing buttons of the coat, and also some other dots indicating either a spray or outlines of a crude face. On one specimen only is there a letter *ja* between *Śrī* and *Pratāpa* (**Pl. IV A, 3**) which Rai Bahadur Prayag Dayal read on 131 specimens in the Banda hoard.<sup>1</sup> Another specimen, a die freak, shows *Śrī-Pra-Pratāpa*. **Pl. IV A, 2**.

All the 269 coins in the third hoard are of copper, but similar in type to the above with *Śrī-Pratāpa*, standing goddess being on the obverse, and *ke* and king's figure on the reverse.

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[1. For the interpretation of the legend *Srī-ja-Pratāpa*, see my next paper in this number. *A. S. A.*]

The hoards raise an important question, viz., how could the coins of a Kashmir king circulate in the region of Banaras and got buried at Rajghat. Apart from the above three hoards, one electron coin of Pratāpāditya with the legend Śrī-Śrī-Pratāpa and the figure of a goddess on the obverse and the legend *ke (da)* and the figure of a king on the reverse was found in 1918 during the Sarnath excavations on the outskirts of Banaras and is now preserved in the Sarnath museum. In 1927 a big hoard consisting of 16,448 coins of Śrī-Pratāpāditya was discovered in the ruins of Aunjar fortress in Tahsil Mau of Banda District.<sup>1</sup> It gave undoubted proof of the extension of Pratāpāditya-Lalitāditya's conquests upto the Yamunā on the south. Kalhaṇa states in the *Rājatarāṅgiṇī* (IV. 134) that king Lalitāditya-Muktāpīḍa of Kashmir, by his drying up the river-like armies of Yaśovarman of Kanauj, acted as if he were Pratāpāditya<sup>2</sup>. The only rational way in which it can be interpreted is that Lalitāditya after his conquest of the dominions of Yaśovarman assumed the name of Pratāpāditya. The political result of this must have been the extension of Lalitāditya's dominion to those regions which were included in the dominions of Yaśovarman.<sup>3</sup> According to the *Gaudavaho*, Yaśovarman's dominions extended upto Gauda;<sup>4</sup> Banaras at any rate was under his sway towards the east. With the passing of the dominions of the Kanauj ruler to Lalitāditya, it is natural that Banaras also should have passed to him. It is therefore likely that one wing of his conquering army marched towards Banaras, and the hoards got buried under circumstances similar to those that operated in the case of the Banda hoard.

On analysis of the Banda coins the alloy was found to contain 10.53% gold, 13.63% silver and 75.82% copper.

1. *Numismatic Supplement*, No. XLI, 1:28, p. 6-9, Prayag Dayal, "Treasure Trove Find of 16,448 Electron Coins in Banda Dt".

2. यशोवर्माद्विवाहिन्याः क्षणात्कुर्वन् विशेषणम् ।

नृपतिर्लितादित्यः प्रतापादित्यतां ययौ ॥ IV. 134

[3. A little later Kalhaṇa expressly claims that as a result of this victory the dominions of Kanauj right up to and beyond the bank of the Yamunā came as effectively under the control of the Kashmir king as his own court yard; cf.

किमन्यत्कान्यकुब्जोर्वी यमुनापारतोऽस्य सा ।

अभूदाकालिकातीरं गृध्रांगणवद्वशे ॥ IV. 145. A. S. A.]

[4. In May 1947 some surface finds of coins made in Monghyr district were sent to me for examination by a local Zemindar. They included two coins of king Pratāpāditya of the type described by Dr. Agrawala in this paper. This find would lend some support to the claim made in the *Gaudavaho* that the sphere of influence of the Kashmir conqueror extended up to Bengal. A. S. A.]

According to Dr. B. B. Lal, Archæological Chemist in India, who at my request made a chemical analysis of one coin from each of the Rajghat hoards 1 and 3, the chemical composition of the alloy is as follows :

Electron coin—

Gold	11.47%
Silver	14.82%
Copper	72.64%
Nickel	0.79%

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Total : 99.72

About the copper coin he writes : 'The metal is reddish in colour and appears to be quite homogeneous. Analysis gave 97.43% copper and 0.68% lead; iron and nickel are in traces. The balance 1.89% appears to be oxygen present in the form of cuprite. The analysis shows that the coin is made of copper. Lead appears to be an impurity'.









Indian Ivory Figure from Pompeii.

# THE IVORY STATUETTE OF INDIAN ART AT POMPEI\*

BY

DR. AMEDEO MAIURI

In last October a singular and unexpected discovery was made in the course of new excavations at Pompei. While the excavations of one of the beautiful houses of Island IX of Region I (the 'house' which will be called the 'house of four styles' from various kinds of Pompeian paintings on its walls) were coming to an end and the heaped earth inside taken out, there was made a cut in a corner of the columns of a big private house which has its ingress in Via dell' Abbondanza. In the corner of the portico with columns of bricks, in an atmosphere almost rustic there appeared the trace of a small box and a wooden almirah both of the usual Pompeian and Herculean style. A portion of them was damaged and upturned by work in the fields. From the earth mixed up with many pieces of bronze, glass and terracotta there was recovered a small ivory statue in a state of partial disintegration. Its ivory had partly worn out and some parts of it were missing (Plate III). It was taken out very carefully from the earth and transported to the factory for repairs. My surprise was great when, instead of finding before me a more or less fine product of Greek and Roman art of bone and ivory as we have in our beautiful collections in the museum at Naples, I saw in the statuette a beautiful and clear product of Indian art. Under the base there was a clearly cut alphabetical sign which removed all doubts and reservations about the

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\* Translated by Dr. Reazul Hasan of the Publications Division, Information and Broadcasting Department, Government of India, from the original Italian article of Dr. Amedeo Maiuri, entitled 'Statuetta eburnea di arte indiana a Pompeii' and published in the Italian Journal *Le Arti*.

source and nature of the find. As it lay long in the humid earth it was necessary to repair and recompose the damaged and destroyed parts. This delicate work was done by Mando Mancini who had already, in the excavations of Piceno, done some good work of repairs and restoration of small statues and ivory reliefs. After its repair and re-integration, I give here a brief account of it, not going deeply into its singular aspects and reserving for myself to take up again its study as soon as possible with more ample documents and material.

I have had the good fortune, for this first examination, of access to the publications of Professor De Lorenzo who is a genial and enthusiastic lover of Indian studies. He has kindly put at my disposal all his material and given me also suggestions, which I here acknowledge with thanks.

The small statue (height M.O. 25) in spite of its partial disintegration has fortunately come to us almost intact. When we look at the figure of Plates I and II, we notice certain insignificant missing pieces, for instance, a portion of the big brooch, a part of the left hand. Also we find some fracture in the middle of the abdomen and discover that some portions of ornaments are missing. At the back of the head we see a small hole made by a boring instrument, in which there was to be inserted a cylindrical rod to sustain probably an ornamental emblem or a sacred symbol if not an object of practical use like a mirror. Under the base there is very finely but clearly cut alphabetical sign of trident (*triśūla*)—a sign which is in the Kharosthi script, which was in use in the west of India from the third century B.C. to 3rd century A.D. and which is generally interpreted as equivalent in value to *śi* (figure I). Such a sign should have been used as a formula to invoke god Śiva or more generally as a term of propitiation in prayers.<sup>1</sup> In our case, excluding the

<sup>1</sup> Bühler G., *Indische Paläographie in Grundriss der indoarischen Philologie u. Altertumskunde*. I, II, Strassburg, 1896,

# THE IVORY STATUETTE OF INDIAN ART AT POMPEI

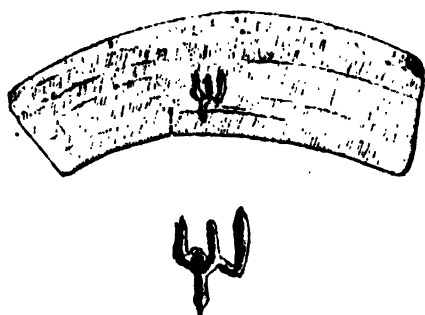


Fig. 1—Alphabetical Sign incised on the base of the figure.



first significance and treating it as a family goddess and not Śiva, and having doubts that a sacred symbol should have been hidden under the base, I hold that this should be simply a mark of the jeweller or his workshop.

The statuette evidently represents a female goddess with sharp and crude sensuality and recalls to our mind what are the typical forms of female nudity in the Indian art. The bosom and pelvis are exaggeratedly developed, with slender waist but otherwise fatty and fleshy. There is an exuberance of provocative sensuality that is without any screen or protection. It will be enough to recall the type of tree woman (*yakshinī*) in the *stupas* of Bharhut and of Sanchi and later on some of the naked women on the reliefs of Bhutesar pillars or on other monuments of Mathura.<sup>2</sup>

But apart from this generic and formal affinity, what reveals the precise nature of this statuette is the association of other two small female figures, who appear to be the helping maids of the goddess. It is Lakshmī (called also Śrī), goddess of beauty and happiness, and wife of Vishṇu. And the two helping servants who are personifications of nymphs stand to symbolise the mythology of her birth from the waves of the ocean—a conception which is analogous to that of the mythology of the Greek Aphrodite. According to Wilson,<sup>3</sup> Lakshmī is the symbol of prolific energy and is represented nude, holding in one hand a lotus flower and in another a garland. These are the symbols we find in the Pompeian statue. I do

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Table I, 34. For the sacred and propitiating nature of Śī, see M. Monier Williams, *Sanskrit-English Dictionary*, Oxford, 1899, p. 1069. I acknowledge with thanks this paleographical and lexical research to Dr. Pugliese who is waiting now for the publication of his Cretal Tables of Villa De Ilaghia Triada, and which have been of great help to me in the collection of bibliographical material.

<sup>2</sup> Cfr. Cunningham, *The Stupa of Bharut*, Plates 21—23, (pillar of Batanmara). Coomarswamy, A. K., *History of Indian and Indonesian art*. Plate XI, 37—39; Vogel, *La sculpture de Mathura in Arts Asiatica*, 1930, Plates XVIII-XIX.

<sup>3</sup> Wilson, *Religious Festival of the Hindus*, Vol. II, p. 188.

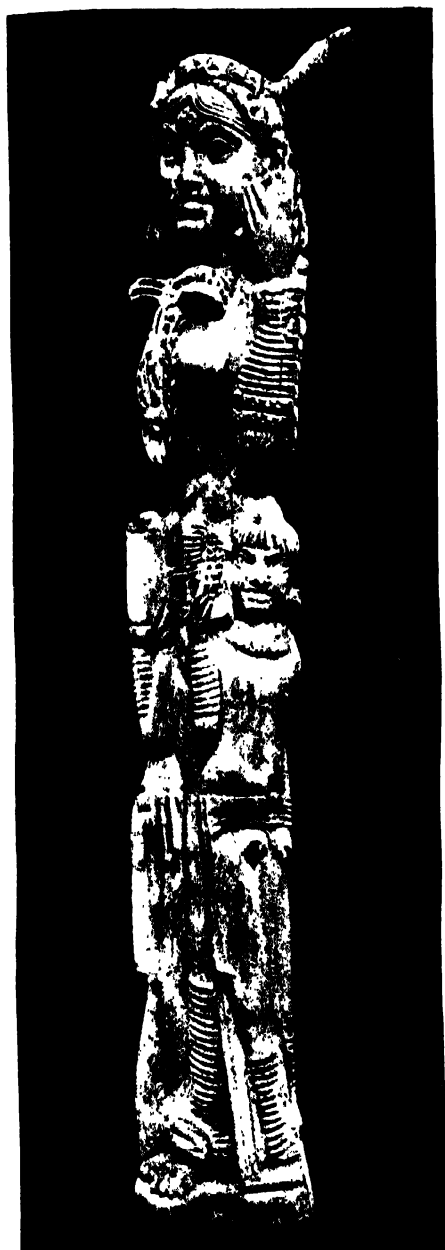
not know any other piece of Indian art with regard to style akin to what I have illustrated here. Its identification is clearly confirmed by a relief on one of the pillars of Stūpa No. 2 at Sanchi (of the Sunga period between 184 and 72 B.C.) where the same scheme of things is visible. There Lakshmī appears naked with bracelets and waist band among flowers of lotus and with two minor female figures who hold toilet things for her.<sup>4</sup> (Plate No.

The mythology of the birth from the waves of the ocean, symbolised by a procession of nymphs, is represented in a relief of Mamallapura of a later age (5th century A.D.).<sup>5</sup> This therefore is the sacred image of the Indian Venus which we find within the walls of a city that had Venus as its great protectrix. It will not be out of place to recall here that on a shop there was represented the Pompeian Venus on a chariot drawn by four elephants. This is a theme in which one can see more than the historical allusion to the triumph of Pompey the Great in Africa, and it is to be recognised that it comes from the schemes and types of oriental religion through Alexandrian art.

The goddess is represented naked and standing with her face in the front and the legs cross-wise; the face is large and full, the eyes open and big, the mouth large and fleshy, the chin round, resting on the soft and fleshy neck, inclined towards left in an expression of beautified and smiling sensuality and triumphant lustful beauty.

<sup>4</sup> This relief is reproduced in Coomarswamy, A. K. *op. cit.*, Plate XIV 52; Cfr. pp. 34 onwards, and 231 (Cfr. our Plate Ib. See also Kramrisch S., *Die Indische Kunst* in Sprniger, *Handbuch der Kunstgeschichte*, VI, *Die äusser-europäische Kunst* (Leipzig, 1929), Fig. 254b on page 251 (Cfr., p. 258; and Codrington B. *Ancient India* (London—1926), Plate 17A. The same association of Laksmī with two minor figures occurs also in a woodwork of a later date coming from South India and reproduced in H. Von Glasenapp, *Heilige Stätten Indiens* (München—1928), Plate 12.

<sup>5</sup> Cfr. Havell; E.B.—*A Handbook of Indian Art* (London, 1920), Plate 53 A, p. 171 (pointed to me by Prof. De Lorenzo).



Indian Ivory Figure from Pompeii.





The two swollen and turgid bosoms almost spherical are prominent like two enormous glands. The sides have curves. The legs are heavy and stout, marked with lines of fat on the knee. The foot rises solidly on the hollow of the base. She holds in the left hand, which is raised as if to balance the weight, two ear-rings, cut in a small rhombic fashion, that hung from the lobe of the ear. Her second hand raised and turned behind the neck holds on the back a festoon of the rich garland.

Lakshmi displays in this ivory statuette the most gaudy and most complicated ornaments of bracelets and jewels that have so far represented to us the nudity of an Indian woman. The naked goddess with a fall of the shawl perhaps of silk on the two sides (*paridhāna*) has, according, to the custom, sleeves and armlets. The folds cover the legs and ankle bone. The bracelets are round the hand. But more artistic and magnificent are the bodice, the cover of the head and of the back.

A heavy necklace of three strings with big beads comes down between the bosom and ends in the form of a pendulum (*padaka*) carved like a lotus flower. And from the garland there issue forth over the breasts two reels fashioned also after the lotus flower. On the forehead below the shining hair parted in the middle hangs a big pendant rosette, probably a sacred symbol. Behind the neck comes out horizontally from the collection of hair a big brooch like a floral horn. At the end there are two long lines of garlands, one made of the lotus flowers<sup>6</sup> and the other of the leaves of the date-palm. After having turned round the head of the goddess, and formed into a diadem, they come down the shoulders upto the lower part of the back almost forming a double border of a rich covering cloth which is very artistically embroidered and ornamented by a big rosette in the centre and by

<sup>6</sup> The garland is woven from the *champaka* flowers rather than lotus.—Editor.

bundles of lotus flowers so as to cover entirely the back of the figure upto the waist-band.

The two young girls that stand by the side of the goddess so as to form almost a single figure with three bodies reproduce even in their rough and simple appearance of youth their type, custom and features faithfully. And the artist has very ably pressed and reduced the model to the simple function of Caryatids (one should observe the figure from the sides and the back) without concealing or diminishing the bulk of the body of the goddess. From this pressing or flattening in the Pompeian statuette comes out a tasteful archaic design that reduces the audacious plumpness of the mother goddess and recalls at the same time at least in this particular case the most beautiful traditions of oriental ivory work and of the Hittite and Assyro-Babylonian art. The two girls are in the capacity of attendants. The one holds in the palm of her hand raised to the level of the shoulder a small quadrangular box closed with a lid (a small case of cosmetics or other toilet things); the other very symmetrically holds two big spiral pendula belonging to the beautiful dress of the goddess.

The discovery of the ivory statuette of Lakshmī in the archaeological strata of Pompei gives us with 79 A.D. a sure *terminus ante quem* for the date of the sculpture. Not so sure is the *terminus post quem*, owing to the fact that the ivory work of India had been known to us only through art productions of the late medieval period,<sup>7</sup> and that our reference to style and form relates more to the great monuments of architecture and sculptured reliefs. It appears to me that this piece of sculpture materialised by a more crude realism has gone beyond the spirit of art that flowered in the Śoṅga period (184—72 B.C.) and

<sup>7</sup> Of the ivory workmanship and its relation with the big art of sculpture and architectural decoration the testimony of the inscription of Bhilsa in the Stupa of Sanchi is precious. Coomaraswamy A. K., *op. cit.*, p. 36 and 136.

this must be referred to either at the end of this period or to the first decades of the Kushan period (B.C. 20—50 A.D.). However, from the point of form and style, it is completely extraneous even religiously from the Graeco-Buddhist Art of Gandhāra.<sup>8</sup>

Apart from its intrinsic value as a piece of art, so notable *per se* for the extreme scarcity of ivory statuettes in Indian art, its most interesting aspect is its discovery at Pompei. As far as I know it is for the first time that a pure product of Indian art is discovered in the archaeological strata of Greek and Roman cities of the Mediterranean basin. And this unique discovery is not made in any of the great cities on the caravan route between East and West about which the explorations in these last years have made precious contributions of discovery, but in the 200 old excavations of Pompei, which was a city of arrival and not of transit. This is a fact that induces us to think more on the still unexhausted resources of our underground material. Much has been written on what was the caravan and sea traffic between India and Rome during the three centuries of the Empire.<sup>9</sup> And here unexpectedly the discovery of a statue of Lakshmi in a flourishing city of Campania adds to the many literary and historical informations about India and her commerce, an additional source of a document of art.

But what could be the way through which this statuette of Indian Venus come to Pompei. The commerce of the ports of Campania and the artistic and

<sup>8</sup> On the art of Gandhāra, see Foucher A., *L'art Graeco-bouddhique du Gandhāra*, Paris 1905, 1918, 1922, and Grünwedel A., *Buddhistische Kunst in Indien in Handbücher der Museen*, Berlin 1910. On the problem of oriental influences see now the interesting pamphlet of Ippel A., *Indische Kunst und Triumpfalbild in Morgenland*, Heft 20 (Leipzig 1929).

<sup>9</sup> Cfr. Rostovzev M. *Storia economica e sociale dell' impero romano*, (Italiana Edition), p. 74 (note 24-25), pp. 105 ff.; here one will find a bibliography. On the coins of Augustus and Tiberius found in India, see Rostovzev M., *op. cit.*, p. 108 (Note 17).

cultural associations of Pompei point to two great centres of commerce between the Orient and Coast of Campania; viz., Alexandria of Egypt and Pozzuoli. And it must be at once mentioned that Pozzuoli was the seat of the Nabatean community till the year 40 B.C. with their "Mahramta", the sanctuary and centre of their association of which there exist only some Nabatean inscriptions and two bases consecrated to god *Dusares*. These were the Nabatean Arabs who having held under the Ptolemies the monopoly of commerce between the Persian Gulf and Egypt carried on trade via the Caravan route of Petra, and preserved for long during the Empire first at Pozzuoli and then at Ostia, their specific function of importing goods of great luxury (jewels, pearls, silk goods, aromatics, spices) from Arabia and India in competition with the caravan route of Trans-Jordan with its outlet at the ports of Syria and Palestine.<sup>10</sup>

But after the expedition of Elio Gallo, ordered by Augustus (25-4 B.C.) to assure the possession of the ports of Southern Arabia to the Roman commerce and to put in order the ports on the Egyptian Coast of the Red Sea, the Eastern policy from Tiberius to Nero was that of establishing direct sea relations with India through a real and proper mercantile marine protected by an armed fleet. As a result with the *Periplus Maris Erythraei* written in the age of the Emperor Domitian and with the information collected by old Pliny there came into existence the first book of seaports for navigation towards India.<sup>11</sup> And the Red Sea no more infested by sea robbers ceased to be a boundary but was turned into a peaceful commercial channel with the Orient.

The structural character of the surroundings in which the statuette has been found and which will appear in a

<sup>10</sup> Cf. Dubois Ch., *Pouzzoles antique*, pp. 99 and 161.

<sup>11</sup> Rostovzev M., *op. cit.*, p. 107. On the commercial route of Egypt, see also Schiaparelli E. *La catena orientale dell'Egitto*, pp. 94 ff.



Indian Ivory Figure from Pompeii.



better way when the excavations are finished induce me to suggest the probable date of the importation of this figure at Pompei to be the age of Emperor Nero, to whom the merit of having pursued an active mercantile policy with the Arab and Indian Orient is attributed.<sup>12</sup> And the date which we have believed to give to this statuette between the end of the Śuṅga period and the beginning of Kushāṇa period (from 20 B.C. to 50 A.D.) would be as far as possible confirmed by the character of buildings.

It is very difficult to account for the presenee of a statuette of one of the major goddesses of Indian religion in a Pompeian house, kept as an object of value together with other articles of dress and domestic objects in glass and in bronze.

Was it the object of worship of a slave girl or the precious and curious souvenir of a patrician or of a rich merchant who frequented the markets of Alexandria and then collected exotic products of Oriental art and religion? If we accept this view, the unknown master of the statuette should have associated the sensual image of Lakshmī, the Indian Venus and goddess of beauty, with the image of Venus, the highest proteatrix goddess of his own city.

But without going into the rich meanderings of hypothesis let us hope that the complete excavation of the house would give us, if not precise data, at least elements of proof for more legitimate inductions.

However, not only in the history of excavations of Pompei but in the history of discoveries of Mediterranean civilization, this discovery at Pompei of a unique and precious object of Indian art and religion will remain memorable.

<sup>12</sup> On the Oriental politics of Nero, see Schur W. *Die Orient politik des Kaisers Nero* in *Klio* (Beiheft 15, 1923), and in *Klio*, 20, 1925, p. 215.





**REPRINTED FROM**  
**THE JOURNAL OF INDIAN MUSEUMS**  
**V O L. I V.**  
**1948.**



## **A Note on the Collections for the National Museum**

*by*

**V. S. Agrawala.**

In the new set-up, the Central Asian Antiquities Museum is expanding as a nucleus for the proposed National Museum of India, which the Government have recently decided to establish. The importance of the National Museum for the future development of the museums movement in India cannot be over-stated. Indeed, only an institution of that kind can serve as the adequate focus for the exhibition of all that is best in Indian art for the sake of India herself on the one hand and of the international world on the other. It is the energy released by such an institution and the scientific methods perfected under its auspices, that can give the requisite fillip to the museums movements in India and tone up its entire being. It is therefore in the common interest of all the museums in the country that the central institution of an all-India pattern and status is soon founded and begins to function.

The decision for its establishment being already taken, several problems, e. g. those connected with the recruitment of the requisite staff, its training, internal organisation, building, equipment and last but not the least acquisition of suitable material to fill the galleries of such an institution, require to be urgently tackled, and the future progress of the Central National Museum will be commensurate with the solution of these problems.

It is gratifying that Government have already directed their attention to the problem of acquisitions. The Central Asian Antiquities Museum has already got some very important material salvaged by Sir Aurel Stein during his three expeditions in Central Asia and consisting of fresco paintings, silk paintings, block-prints and drawings, textiles, wooden inscribed documents, stucco figurines and miscellaneous articles of domestic use, offering a visual commentary on the state of civilisation in that vast crucible flourishing from the 3rd to the 10th century A. D. in the "Inner-most Heart of Asia"-a veritable crucible for the mingling of the different cultures - Chinese, Indian, Iranian and classical. The story of India's cultural expansion beyond her northern frontiers is reflected in these relics. A judicious display of this varied material would constitute a first class gallery in the proposed National Museum.

The picture of India's earliest civilization that once flourished in the Indus Valley in the third millennium B. C. and that connects India with the other great civilizations of antiquity like the Egyptian and the Mesopotamian, comes as a natural legacy to the National Museum of India. In the new conditions created by

the country's partition, it is not yet certain, how far this picture could be made complete or representative in the gallery of the Central Museum, but it is hoped that India's eventual share may be adequate to make a good show in this respect. For India's sculptural arts, the National Museum will have to draw upon the results of the past excavations of the Department of Archaeology. For the Department of Art, the museum will have to begin with fresh acquisitions and in this respect some decisive steps have already been taken by acquiring the Treasuryvalla Art Collection, Bombay, consisting of unique and rare examples of Rajasthani and Pahari paintings and South Indian bronzes; Schwaiger Art Collection, Delhi, comprising some very rare specimens of textiles, including old shawls, brocades, embroidered silks, printed calicos, Gujarat patolas and Himroo and Badla work, illustrated manuscripts, paintings and objects of jade and crystal; and Shantivijay Collection, New Delhi, which includes some very fine pieces of jade and crystal and also textiles. But Indian art has a vast range due to the intense creative activity of her artists during the last one thousand years, and great efforts will have therefore to be made to gather a somewhat complete and harmonious collection of Indian art treasures by acquiring extensively and liberally art objects as and when they are offered.

It is a matter of good fortune that patriotic sentiment is working in favour of the National Museum and there are indications already in sight that philanthropic owners of art treasures in India may eventually agree to part with their collections in favour of the National Museum, as soon as guarantees of proper custody and display in a worthy building would be forthcoming. To create an institution of national dimensions, as the Central National Museum is likely to be, is a task for the whole nation, in which the people as a whole should feel the pride in creation and possession. All sons and daughters of India who re-act to aesthetic pleasure must feel that the creation of the National Museum is a task in which they should all share. We are now building for centuries and many generations to come and we should build with religious fervour a national temple for our Muses, which the proposed National Museum would be in every sense of the term. Not only private owners through gift or sale have to enrich the museum, but also the generous rulers of Indian States, whose palace collections are a veritable mine of ancient art relics, have to take their due share in replenishing the galleries of the National Museum with suitable objects of art. In this instance, it is gratifying to record that His Highness the Maharaja of Bharatpur has taken the lead in donating for the coin-cabinet of the National Museum, a unique set of 65 gold coins of the Gupta Emperors, out of the Bayana hoard of gold coins recently found in his State. Such examples are worthy of emulation and there is no doubt that with the willing co-operation of the Indian Princes, a worthy Art Gallery would be assembled for the whole nation to serve as "a thing of joy forever".





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# INTERNAL ORGANIZATION OF A MUSEUM

Dr. V. S. Agrawala

In this paper my aim is to raise the discussion about the internal organization of a museum with a view to maintaining the institution at its maximum level of efficiency. The museum is apt to have a two-fold aspect, viz. as a store-house of specimens and as an instrument of education. With the usual practice to consider the museum in the context of a store-house of antiquities, the danger is that the museum assumes a static existence where things come and get deposited. But this view falls short of the potentialities of a museum and its mission to serve as a powerful instrument of education: In fact, a museum should in no way be less important than a full-fledged educational institution or rather a university-college functioning for the systematic investigation of facts and interpreting them for the promotion of learning and educating the people. In this latter aspect lies the full destiny of a present day museum, and museum in modern times will stand or fall by the measure of their capacity to adjust their working to this dynamic gear. Looked at from this angle, the museum springs up into our view as an enlivened entity, working towards a definite aim and governed by a directive control, which converts it into an organised workshop of efficiency. This view brings a museum to face the same tests of efficient functioning as apply in the full American sense to centres of industrial production.

Examined in this dynamic aspect, a museum comes to occupy the centre of a bigger picture and assumes an exceptional importance. There are three fields of tension which begin to act and re-act on the museum, when it is placed in the centre of the above dynamic picture. Firstly, the museum is placed in relation to its own aim and mission. This is a vital test which vouchsafes for the efficiency of a museum. If there is no definite aim, the energy of the workers is likely to be frittered away in many directions without achieving substantial results. A definite scope and its proper realization by those in charge of a museum are the two essential factors which contribute to the success of the institution. As a practical proposition it is a question of building up to a certain pre-determined plan, which must be adhered to strictly by those who control the museum, both from inside and from outside. Fixation of the scope and aim of a museum is therefore the pre-requisite of good, efficient, useful and economic building up and this should be the first plank in our programme. The pre-determined aim serves as a guiding star which leads the museum from step to step onwards to its destiny. To begin with, therefore, all institutions in the field should have a well devised intelligent plan with clear definition of the scope and purpose of a museum. This first step gives meaning to all our subsequent actions. This first field of tension may be described as the *museum versus its own-self*.

The second field of activity is opened up by the *museum versus its own staff*. If there is no energising in this sphere the museum

becomes unproductive and almost drops into a state of coma, where nothing grows and nothing is done. The staff consisting of the curator, his assistants and preparators, constitutes the most vital part and indeed the very soul of a museum. The problem of the staff is two-fold, viz. to have a trained staff and secondly to have a dynamic staff. A combination of these two factors is ideal for the success of a museum. In this picture the curator emerges as the most dominant factor upon whom the success of the museum depends. His will and capacity for work make the museum what it can be. It is necessary that the curator is able to work himself and also to plan work for his staff. The capacity for sustained and planned work by the curator and his staff makes for sixty percent of a museum's success. In this sphere, the curator as the presiding genius of the museum assumes an importance, not equalled by any other factor. He must therefore energise.

The third powerful factor which exercises a pull on the activities of a museum is the public. The museum in fact exists for the people; it prospers only if it creates for itself a field to serve for the public by opening up new vistas of scientific and cultural interests and knowledge. It is the duty of the museum staff to take the public into confidence about the organization of the institution and its valuable contents. It is at the same time the duty of the public to take interest in the museum and to help in keeping the institution and its workers in proper format.

Each museum from the organizational point of view has a two-fold existence, viz. the museum with regard to its external control in respect of finance and administration, and secondly internal organization which is in the hands of the museum staff itself. In the latter field the curator as the man on the spot enjoys more or less full autonomy. If within his powers he applies himself to the maximum extent to render full efficient service to the museum, he may be said to have done his job well and this will certainly lead to healthy functioning of his institution. As a matter of fact, the museum suffers not so much from external handicaps, as from the incomplete activity or inactivity of its own members in the field of administration. Supposing that a provincial museum has a sanctioned budget of 20 or 30 thousand rupees per year, the pressing question which forces itself upon us is not how much more should we have got, but how much we can do with what we have got. We shall for the time being accept the salary of the staff and the amount of the purchase fund and other contingencies at what they be, and then shall apply ourselves to consider what each one of us could do to tone up his respective institution.

Here attention should be focussed on the four-fold programme of a curator's activities in relation to his museum. This consists of four major heads, viz. *ACQUISITION, REGISTRATION, EXHIBITION and PUBLICATION* of the museum material. It can be said without fear of contradiction that much of this essential four-footed programme can be fulfilled by the curator with his own efforts. For example, in the matter of acquisition we may not have all that we want, but whatever we have, must receive adequate attention. As soon as the object has entered the

museum, its custody and care become a charge on the curator's time and attention. The first step is to guarantee proper entry to the antiquities and objects in the accession registers of the museum. There can be no earthly excuse for delay in this most essential item of museum work. The life history of a specimen in the museum starts from its accession in the museum books. The maintainance of the proper manuscript, registers and catalogues is the curator's own job, and if this is not done well, none else can be blamed for it. It would not be difficult to come across cases of lapse in respect of proper registration - cases where antiquities once acquired for the museum have been allowed to remain unentered for five years or more. This should be considered inexcusable. Our first request therefore to all concerned would be: 'Please be prompt and up-to-date in accessioning your acquisitions. Enter at once in your books whatever you allow to enter the museum'.

Our second duty in respect of antiquities is preservation. Preservation is a technical job requiring expert handling, but a curator would do well if he realises that there is a problem of preservation and if he takes care to do as much as is possible under the special circumstances of his case, he can certainly consult colleagues and take even preliminary steps, if not more, to tackle the problem of preservation. It means that the curator takes interest in his material and that he is conscious of the problems presented by that material. Apart from preservation as a technical problem there are certain commonsense directions which can be followed and adopted in all museums. For example, periodical inspection at stated intervals, placing of disinfectants in the showcases and replacing them at proper time, fumigation and application of harmless preservatives against insect-pests, etc.

The third problem in which a curator has freedom of action is exhibition, i. e. display of specimens or antiquities in the gallery. Here also it can be done by taking clear decisions with respect to what is to be shown and what is to be sent to the reserve collection. Display in galleries raises the problem of show-cases, which may cost money and require additional funds. For some museums, this may be a real handicap, but for most of the provincial museums, the problem of additional showcases is not a real obstacle, at least of not such a nature as to make the curator ineffective in his work of arrangement. Even with the help of the existing space and show-cases, it should be possible to display all that is best with us and to send to reserve all that is of lesser importance. A necessary corollary of the work of arrangement is the work of labelling. There may be printed labels, labels painted on wood, or labels printed on cellophane paper and secured between two glass sheets by a beading, or labels written neatly on ground glass, or labels typed or even labels written with a neat hand in black Indian ink. Whatever the form of labels that we may afford, the fact remains that a curator must ensure a label for each exhibit which is on show. 'No exhibited specimen without a label' should be our motto. It is also necessary that individual labels are supplemented by case labels and gallery labels and with charts and maps, which can be usefully prepared by curators to provide intelligent explanations for the exhibited specimens. In this sphere, the curator is the master of all

he surveys and his right there is none to dispute. An exhibited specimen without a label in a museum case stands as the accusation of the museum official responsible for it. If the curators in the museums in India were to follow an arduous programme of providing labels to all their exhibits within the next one year that would be an achievement of no mean degree. I, for one, would not be fastidious about the artistic excellence of the labels so long as the label unobtrusively puts intelligent information into the head of the visitor in respect of the item on show, and then leave the individual visitor to appreciate more advantageously the exhibited specimen.

The fourth programme in which the curator wields unlimited power and freedom of action is that of publication and educational activity which are the two sides of the same medal. Both these things depend on the individual curator's initiative and knowledge, the more one wishes the more one can put forth in this line. For example, arrangement of regular gallery lectures which should be properly announced, showing round conducted parties of students in the galleries, creating contacts with the educational institutions and even going and lecturing there, holding special and temporary exhibitions, are some of the items which may be usefully undertaken and which would go a long way in creating public interest in the museum and pushing forward its activities. Similarly, articles in the local press from time to time drawing attention to the value of the contents of the galleries or creating general interest in the subject represented in the museum, can be published by the curator and his staff without looking for outside help. The essence of the problem is to achieve what we can achieve without own initiative and effort. If a museum is strong on the side of its internal organization it will have much less cause of complaint with regard to the absence of outside facilities. On the clear realization of this fact backed by a determination to exert as much as possible, a curator can in no time transform his museum into a living centre of useful activity for the increase of knowledge. Once restored to internal health, most of the museums would begin to pulsate with fresh life and indeed find their basis to justify natural future expansion. In the new order of things the museum have first to look to their own curators for pushing up their case for proper attention. With this part of the work well done, external help would probably follow as a matter of course.



## EMBASSIES IN ANCIENT INDIA

BY

V. S. AGARWALA

To maintain efficiently her far-flung contracts in the international world, India had developed an intricate technique of ambassadorial relationships. The ambassador or *Dūta* was according to Śukrāchārya 'the Minister of Diplomacy', that is he enjoyed important ministerial rank as the representative of one state to another. Inter-state relationship or diplomatic behaviour was in the charge of the *Dūta*. Certain requisite qualifications were laid down for selecting a person to such a responsible post. According to the same writer, the king's ambassador was to be distinguished by his capacity to probe into the secrets of others, by studying the outward signs and movements, good memory, capacity to discriminate proper time and place, proficiency in diplomatic counsels, eloquence and absence of all fear.

The theory and practice of Indian diplomatic science achieved its highest evolution in the doctrine of the *Maṇḍala*, i.e., the theory of the Orbital States. In simple language it means that the parent state stands at the centre of the picture in which each other state howsoever far and near moves in political orbits described in accordance with the laws of mutual attraction and repulsion governed by national self-interest. The other states *vis-a-vis* the central one can function only in one of the following manners : (1) Friendly state (*Mitra*), (2) Enemy state (*Arī*), (3) Neutral state (*Udāsīna*), (4) the state sitting on the diplomatic fence (*Madhyama*), and (5) Conquering or *Wehrmacht* state (*Vijigīshu*). A shrewd diplomat is he who can at every stage of the journey have a clear grasp of the groupings of all the

states with which he has to deal into one of these five classes and on that basis adjust the behaviour and preparedness of his own country. Obviously the responsibilities of the ambassador charged with this onerous task are extremely heavy requiring shrewdness, clear thinking, constant vigilance and abundant tact.

Thus political thinkers in India had with exceptional sagacity provided their ambassadors with a clear pattern on which they were to build carefully a structure of the political and cultural relationship of their own country with others. Indian history provides ample evidence to show that India maintained embassy relations with other countries. The place and functions of the ambassadors are subjects of discussion in books of political science. Thus Kauṭilya classifies the diplomatic agents under three categories, namely full-fledged ambassadors of the rank of a minister invested with full powers of negotiation, known as *Nisriṣṭārtha Dūta*; deputy ambassadors or *charge'd affairs* with limited powers to act according to instructions (*Paramitārtha*); and agents who only acted as bearers of documents (*Sāsanahara*). Krishna, for example, was ambassador of the first class who carried with him full powers to make war or peace on behalf of the Pāṇḍavas. Aṅgada deputed by Rāma to the king of Lāṅkā, belonged to the second class, who proceeded to act within a definite frame of instructions.

Indian ambassadorial history during the last 25 centuries acquaints us with important instances of India exchanging embassies with the outside world. First in chronological order comes India's intercourse with the classical world. Chandragupta Maurya after defeating Seleukos, consolidated his paramount position as the Emperor of the whole of India from Afghanistan to Mysore. He established diplomatic relations with the Greek kings on India's western frontiers. As observed by Vincent Smith "Chandragupta was the first Indian

Emperor, more than 2000 years ago, who, after defeating Seleukos entered into possession of that 'scientific frontier' sighed for in vain by his English successors and never held in its entirety, even by the Mughal monarchs of the 16th and 17th centuries." Soon after the conclusion of peace in 303 B.C. Chandragupta received at his court Megasthenese as an envoy deputed by Seleukos Nikator. India owes to Megasthenese a deep debt of gratitude for the illuminating account of the country and her institutions recorded by him in his book "Indika" now available to us in the form of copious extracts made by subsequent writers. Stationed at Pāṭaliputra Megasthenese had from his personal observations recorded a trust-worthy account of Chandragupta's civil and military administration.

Bindusāra, the son and successor of Chandragupta Maurya and heir to a great empire, continued the traditions of his father and exchanged envoys with the Greek King Antiochos Soter, who deputed Deimachos as his ambassador to India in 280 B. C. The Greek allies in Western Asia maintained friendly relations with Indian emperors and a tangible proof of this familiar intercourse is available in the correspondence between Antiochos and Bindusāra, the latter asking the Greek king to send to him some figs and raisin wine, which at that time were famous all over India as *Kāpiśāyanī-drākshā* and *Kāpiśāyana-mdhu*.

Asoka was the first emperor who clearly perceived and tried to achieve the international unity of Asia and with that end in view sent his envoys to the courts of his Greek neighbours on the West including Antigonas Gonatas, King of Macedon (277-239 B. C.), Magas, King of North Africa (285-258 B. C.) and Alexander, King of Epirus (272-258 B. C.), Ptolemy Philadelphus, who ruled in Egypt from 285 to 247 B. C. and who is referred to in the Kalsi rock edict of Asoka, near Dehra Dun, despatched an envoy named Dionysius, who



presented his credentials in the court of Emperor Aśoka. Aśoka on his side returned the compliment by sending his envoy to the court of Ptolemy. Another embassy was deputed by Aśoka to the court of Antiochos II, King of Syria and Western Asia from 261 to 246 B. C.

Aśoka also deputed his own son Mahendra and daughter Saṅghamitrā as leaders of a highly important mission to Ceylon and those two august leaders brought about a lasting transformation in the religious and cultural life of Ceylon by giving her its religion, literature and language.

King Bhāgabhadra of Central India received Heliodorus of Taxila as an envoy of the Greek King Antialkidas, ruler of Taxila, about 140 B. C. The Greek ambassador came under the influence of the Bhakti cult of god Vāsudeva and he styles himself as a *Bhāgavata* in the inscription engraved on the Garudadhvaja pillar dedicated by him.

An Indian embassy reached the court of the Roman Emperor Augustus about the year 26 B. C. with a letter from an Indian king written on parchment. A specially important embassy was despatched to the court of Emperor Trojan about 207 A. D. Indian agents also reached the court of the Emperor Antoninus Pius about 138 A. D. A gold coin of this emperor was recently found at Mathura.

The exchange of embassies between China and India also presents a brilliant chapter in the respective history of the two nations. According to Chinese traditions, Indian agents were deputed with presents to the court of Emperor Ho-Ti (89-105 A. D.). India's intercourse with China was specially brisk in the Gupta period from the fifth to the seventh century, A. D. This was reflected in the exchange of a very large number of scholars, pilgrims and envoys from both sides. According to the Chinese traditions important Indian missions reached China in the year 426, 477 and 502 A. D. and this inter-

course reached its climax between the years 503 and 571, when no less than nine missions travelled both ways. Specially famous is the mission of Sungyun, deputed by the Empress of the later Wei-dynasty of China. In the reign of Harsha in the year 643-5 A. D., Chinese envoys of the great Emperor Tai-tsung came to the court of Harsha passing through Tibet and Nepal, which were then allied countries. Early in 641, Harsha's Brahman ambassador had proceeded to China on a good-will mission. He returned in 643 accompanied by a Chinese bearing a reply to Harsha's despatch. The mission remained for a considerable time in India and did not return to China until A. D. 645. The next-year, Wang-Hiuen-Tse, who had been the second in command of the earlier embassy, was sent by his sovereign as head of a new Indian mission with an escort of 30 horsemen. Wang-Hiuen-Tse visited India three times. In 657 he was sent by imperial order to offer robes at the Buddhist holy places and entered India through Nepal, by the Lhasa Road, which was then open and used by many Buddhist pilgrims. After paying his respects at Vaiśālī, Bodh-Gayā and other sacred spots, he returned to China through Kapiśa or Northern Afghanistan, by the Hindukush and Pamir routes.

In the year 795 A. D. King Śubhakerdeva of Orissa sent a beautifully illustrated manuscript of *Gaṇḍa-vyūha* from his own palace library to the Emperor of China through a special mission.

Khusru II, king of Persia, according to the Arabic historian Tabari, received in 625-26 A.D., a complimentary embassy from the Chalukya Emperor Pulakesin, ruler of the Deccan. The courtesy was reciprocated by a return embassy sent from Persia which was received with due honour at the Indian court. A large fresco painting in Cave No. I at Ajanta seems to show a vivid representation of the ceremonial attending the presentation of their credentials by the Persian envoys in the court of the Indian emperor. This picture is of

the highest value as a contemporary record of the political relations between India and Persia in the 7th century A. D. when both countries were at the height of their cultural and political greatness.

In the 9th century King Bālaputradeva of Sumatra sent his envoy to King Devapāladeva of Magadha and through him made a gift of five villages to the Nalanda University. The copper plate bearing this important document in Sanskrit has been discovered in the ruins of the Nalanda University.

The stream of cultural and political missions exchanged between India and foreign countries continued right through the medieval Hindu and Muslim periods. It is thus clear that Indian embassies of to-day come in the wake of a great tradition and are destined to play a distinguished part in the cultural and political contacts of India with other countries.

## CURRENT PROPER NAMES (मनुष्यनाम) IN PAṆINI

BY

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Names of persons in India have undergone evolutionary changes through the following periods, (1) Rig-vedic, (2) Later Vedic, (3) Sutra and Buddhist, (4) Kushana and Gupta, (5) Medieval and (6) Modern. Proper names from each historical epoch reveal certain distinguishing features which taken together constitute a 'style' for that age. For example, the most usual method of referring to a person in the R̥gveda is to give his own name along with another epithet derived from his father's name. In the later Vedic literature the emergence of the *gotra* name replacing the patronymic is a marked feature. In some cases the personal name is accompanied by the name derived from a country or locality, e.g., Bhīma Vaidarbha (*Ait. Br.*, vii. 34). In the *Vāṃsa* lists of the late Brāhmaṇa period we find also the frequent use of metronymics. (P. V. Kane, *Naming a Child or Person*, I.H.Q., June 1938, pp. 227-28). On the other hand we also notice that there is in the Vedic literature hardly any individual name which is derived either from the names of gods or from the names of stars, both of which were regular features of names in the Buddhist period and must be assigned to a much later epoch. It should be presumed that such a transition was accompanied by a corresponding change in the religious attitude of the people.

*Glasses of Pāṇinian Names.*—In the light of the above if we examine the evidence regarding names in the *Aṣṭadhyāyī* we discover certain chronological considerations of great value besides the purely cultural interest

of the subject. These will be discussed in their proper place.

There are four principal classes of names dealt with in the *Ashtādhyāyī*. Firstly, a considerable number of *sūtras* usually having a *gaṇapāṭha* teach the formation of *gotra* names (Ch. IV, *pāda* 1). It shows that the ancient custom of designating persons after their *gotra* names was in full swing upto the time of Pāṇini. We find the use of the *gotra* names as a normal feature in the time of the Buddha. A majority of these *gotras* traced their beginning to ancestors who lived long anterior to Pāṇini. Secondly, the patronymic or the name derived from that of the father is also prescribed (*Tasyāpatyam*, IV. 1. 92, etc.). Thirdly, a vast body of names discussed by Pāṇini are those derived from place names or localities which were either the residence of a person himself or the abode of his ancestor (*abhijana*). It was in one way very fortunate that Pāṇini took within his purview this line of name-formation, for the geographical evidence incidently incorporated is of the utmost value. The fourth class of names includes purely personal names and these are chiefly the object of the present study.

Pāṇini refers to individual names as *manushya-nāma* (V. 3. 78) or simply as *saṁjñā* (V. 3. 75; V. 2. 106; VI. 2. 159; VI. 2. 165).

*Special Features.*—Pāṇinian names are distinguished by the following three main features: (1) name as a compound word consisting of two members, (2) the principle of contraction as applied to the two or more parts of the compound, and (3) the custom of deriving names from stars (*nakshatra-nāma*).

Names which are compound words normally consist of a *pūrvapada* and an *uttarapada* (V. 3. 82), and the compound is either *Bahuvrīhi* or *Tatpurusha*. Almost all names envisaged in the relevant sections (V. 3. 79—83;

VI. 2. 106—115) are polysyllabic (*bahvach*), i.e., consist of more than two syllables (*ūrdhvam dvitīyādachah*, V. 3. 83), the actual number of syllables being usually four or five. According to the Gṛihya Sūtras a name should end in a *kṛita* word and never in a *taddhita*. Pāṇini gives two examples of such ending, viz., *datta* and *śruta* (VI. 2. 148). To these Patañjali adds *rakshita* (Bhāshya Vol. I. 189) and *gupta* (I. 37, e.g., Amragupta, Śālagupta). Both these characteristics are confirmed by the injunction of the Yājñikas quoted by Patañjali (I. 4) and apparently based on the living tradition of the Gṛihya Sūtras.<sup>1</sup> *Mitra*, *Ajina* (VI. 2. 165, V. 3. 82) and *Sena* (IV. 1. 152; VIII. 3. 99) are other words which were used as the second member of personal names in the time of Pāṇini.

*Contraction of Names.*—The principle of contraction as applied to names is unknown in the Vedic literature. In Pāṇini we find elaborate rules governing the shortening of individual names, but *gotra* names were not subject to contraction. It is only in compound names that we find the dropping out of the *uttarapada* (V. 3. 82) or the retention of only the first two syllables and the elision of the rest of the syllables (V. 3. 83). Pāṇini analyses the psychological factor responsible for the contraction of a personal name; it is the desire to address a person out of endearment (*anukampāyām*, V. 3. 76). For example Vyāghrājina, a dignified name, was contracted to Vyāgraka (V. 3. 82) which was a more affectionate form, and Devadatta to Devika, Deviya, and Devila (V. 3. 79). There is also a provision to expand it to Devadattaka (V. 3. 78) which for syllabic quantity exceeds even the

<sup>1</sup> For rules about names in the Gṛihyasūtras, see Hiranyakeśi, ed. Kriste, II. 4. 10; Aśvalāyana, ed. I. 13. 5-6; Kāthaka, III. 10. 2; Pāraskara, I. 17. 2; Āpastamba, VI. 15. 9; Mānava, I. 18. 1. (I.H.Q., 1935, p. 88); Baudhāyana, II. 2. 24-31 (I.H.Q., June, 1938, pp. 223-44 P. V. Kane) and also Gobhila, II, 7. 15-16; Sāṅkhayana, I, 24; Khādīra, II. 2. 31-32; Bhāradvāja, I. 26.

original form. Similarly in the opinion of the eastern grammarians Upendradatta was shortened to Upada and Upaka (V. 3. 80) and also to Upiya and Upila, the last being the form which must have been transformed into Upali, a name so well-known in Buddhist literature.

*Names from Stars (Nakshatra Nāma).*—The next important fact about names which we learn from Pāṇini is about the custom of designating persons after the asterism of their birth (IV, 3. 34-37; VIII. 3. 100). For example a boy born under Tishya would be called Tishya and one born under Punarvasu named Punarvasu (IV. 3. 34).<sup>2</sup> In the whole of the Vedic literature comprising the Samhitās, Brāhmaṇas, Āraṇyakas, and Upanishads, examples of *nakshatra* names are practically non-existent. We find only Chitra and Āshāḍha out of a very limited number of cases and even there the stellar significance of the names is doubtful.<sup>3</sup> The star names, therefore, indicate a definite watershed of time separating the sutra period from that of the Brāhmaṇas and their supplementary portions, the Āraṇyakas and the Upanishads.

On the other hand we find in the Pāli literature the star names to be a common phenomenon. The inscriptional records of the Mauryan and Sunga periods although removed in time from Pāṇini show the continuation of the star names over a period of several hundred years. The Gṛihyasutras give the earliest indication of the practice of star names. According to Āpastamba the *nakshatra* name is the secret name of the person. The Khadira, Varāha, Hiranyakeśi and Gobhila Gṛihya-

<sup>2</sup> *Tishyaścha mānavakaḥ Punarvasū cha mānavakau Tishya-Punarvasavah.* Patanjali takes these examples implied in sutra I. 2. 65 (Bhāshya I. 231).

<sup>3</sup> As Chitra Gāṅgyāna (Sāṅkh, Ar. III. 1); Āshāḍha Sāyavasa (Jaiminiya Br.) who was a *grāmanī* of the Sārkarākshyas; Āshāḍhi Sauśromateya (Satapatha, VI. 2. 1. 37), son of Āshāḍha and Suśromata.

sūtras contain injunctions about having *nakshatrāsrya* names. Pāṇini clearly falls in a line with them.

Below is a detailed analysis of the different types of proper names in Pāṇinī, explaining the rationale of a majority of names in the inscriptions of the post-Pāṇinian period. The names fall under three groups, *viz.*, miscellaneous names, star names and abbreviated names.

#### A. *Miscellaneous.*

1. Names with *viśva* as the first member हुत्रीहोविश्वसंज्ञायाम्, VI. 2. 106). The pre-Pāṇinian examples are Viśvāmitra, Viśvamanas (Jaiminiya Brāhmaṇa) and Viśvasāman; they are not so varied as in the Jātakas which record Vissakamma (I. 314), Vissasena, king of Baranasi (II. 345), Vessabhu Buddha, Vessamitta, former king (*porāṇakarājā*) (VI. 251), and Vessantara.

2. Names ending in *udara*, *aśva*, and *ishu* (उदरास्वेषुषु VI. 2. 107). The names cited in the Kāśikā, *viz.*, Vṛikodara, Haryaśva, Maheshu seem like pre-Pāṇinian. Allied classical instances are absent except Bahuśodarī *devadhitā* found in a Jātaka (VI. 83).

3. Names ending in *karṇa* (VI. 2. 113) as Mayūra-karṇa (Śivādigaṇa, IV. 1. 112) and a few others in the gaṇapāṭha which seem to be of the same age as Pāṇini.

4. Names ending in *kaṇṭha*, *prishṭha*, *grīvā* and *jaṅghā* (VI. 2. 114). Names with these endings are rare in the Vedic literature except Śitiprishṭha and Śitikaṇṭha. Pāṇini mentions Kalaśikaṇṭha, Dāmakaṇṭha, and Khārī-jaṅgha in the Upakādi group (II. 4. 69), which appear to be contemporaneous names. Tālajaṅgha cited in Kāśikā was certainly an earlier name. Maṇikaṇṭha occurs in the Jātakas (II. 282).

5. Names ending in *śriṅga* (VI. 2. 115). Rishya-śriṅga is the only example in the Buddhist or classical period.



6. Names with the instrumental form *manasā* as first member (VI. 3. 4). *Manasādatta* and *Manasāgupta* are the illustrations in *Kāśikā*, but no example of the actual use of these in literature is met with. However, they seem to have a distinctly classical look about them.

7. Names ending in *mitra* (VI. 2. 165), are few in the Vedic literature, but represented by an extensive series in the post-Pāṇiniya period, e.g., *Sarvamitta*. (*Jāt.* V. 13), *Jitamitta* (*Jāt.* I. 37), *Chandamitta* (*Jāt.* I. 41), etc. The richness of *mitra*-ending names in the later epigraphical records<sup>4</sup> contrasts with their paucity in the pre-Pāṇinian epoch.

8. Names ending in *ajina* (VI. 2. 165). The *Kāśikā* cites *Vṛikājina*, *Kulājina* and *Kṛishṇājina*. In the *Jātakas* the only examples are *Migājina* (VI. 58) and *Kaṇhājina* (daughter of *Vessantara*, VI. 487). Pāṇini himself refers to *Kṛishṇājina* in the *Upakādi* (II. 4. 69) and *Tika-Kitavādi* (II. 4. 6) groups. The paucity of *ajinanā* names in literature may be due to the elision of *ajina* as noted by Pāṇini in *sutra* अजिनान्तस्योत्तरपदलोपश्च V. 3. 38. For example, *Vyāghrājina* was contracted to *Vyāghraka*.

9. Names of species (*jāti-nāma*) adopted as personal names (*manushya-nāma*, V. 3. 81), e.g., *Vyāghraka*, *Simhaka*. The rule for adding *ka* was not constant, hence *Vyāghrila* and *Simhila* were also possible (*Bühler's Sanchi List*). This custom of deriving names from animals was unknown in the Vedic period. Pāṇini

<sup>4</sup> The Sanchi inscriptions have *Balamitra*, *Samghamitra*, *Ahimitra*, *Satyamitra* (= *Sachamitra*) among males, and *Nāgamitrā*, *Uttaramitrā*, *Vasumitrā*, *Rishimitrā* (= *Isimitā*), *Jitamitra*, and simply *Mitrā*, among females (*Bühler's list of Proper Names from Sanchi Ins.*, Ep. Ind., Vol. II, pp. 403—407) and *Bharhut* adds *Samghamitrā* and *Gargamitrā* (*Lüders List*, Nos. 759—882), and the *Pañchāla* coins give *Bṛihaspatimitra*, *Agnimitra*, *Bhānumitra*, *Bhūmimitra*, *Dhruvamitra*, *Phālgunimitra*, *Sūryamitra*, *Vishnumitra*, (*Allan, Indian Coins*, p. cxvii) and recently *Prajāpatimitra* on a *Pañchāla* Coin.

makes reference to contemporary ideals of personal bravery in instituting comparisons with a tiger or a lion (II. 1. 56).

10. Names ending in *sena* (VIII. 3. 99). Pāṇini makes special reference to *senānta* names in sūtra IV. 1. 152 ( सेनान्तलक्षण कारिभ्यश्च ). The only *senānta* names in the lists of Vedic teachers are Yajñasena (Tait. S., V. 3. 8. 1; Kāṭhaka Saṁ., XXI. 4) or Yājñasena<sup>5</sup> and Rishiṭṭishena (Nirukta II. 11), although Patañjali gives us to understand that Jātasena was also the name of a Rishi. Among ancient *senānta* names of Kshatriyas, Patañjali points out Ugrasena Andhaka, Vishvakṣena Vṛishṇi and Bhīmasena Kuru. If we now turn to post-Pāṇinian names, we find *senānta* names to be much more common, e.g., Vārishena and Harishena in Patañjali (*loc. cit.*); Sothhisena (Jāt. V. 88) equal to Svastisena). Śūrasena (Jāt. VI. 280), Ugrasena (Uggasena king of Benares, IV. 458), Upasena (Jāt. II. 449), Atthisena (Jāt. III. 352), Nandisena (minister of Assakarāja, Jāt. III. 3), Jayasena (Jāt. Nidāna, p. 41), Chāṇḍasena (Jāt. VI. 157) and Bhaddasena (Jāt. VI 134). Also Dhamasena, Varasena at Sanchi, Nāgasena (Lüder's List 719), Mahendasena (LL. 850) at Bharhut; and Asāḍhasena from Pabhosa.

According to Pāṇini VIII. 3. 100 the names of asterisms precede the word *sena* to form individual names, e.g., Rohiṇisena, Bharāṇisena, etc., and the one name without which Pāṇini's special ruling (*agakārād*, VIII. 3. 100) would remain unillustrated is Śatabhishaksena—a name seldom found in actual instance.

11. Names ending in *Datta* and *Śruta*, when a benediction is implied (VI. 2. 148), e.g., Devadatta, 'he

<sup>5</sup> A descendant of Yajñasena, also called Śikhandin; Kaush. Br. VII. 4. In the list compiled in the Jaiminiya Br. Dr. Caland also gives Sutvaṇ Yājñasena.

whom the gods may bestow' and Vishṇuśruta 'he whose wishes Vishṇu may hear'. These are examples of names ending in *Kṛita* of which we hear so often in the Grihya-sūtras. We do not usually come across any real name ending in *śrura* in the Vedic or Buddhist literature. The number of names ending in *datta* is also limited as Brahmadata (Jaim. Br., King of Kosala, also called Prasenajita), Punardatta and Sūryadatta (Śāṅkh. Ār. VIII. 8), but in the Buddhist literature they are much more varied as Devadatta, Bhūridatta (Jāt. VI. 167), Matidatta (Jāt. IV. 342), Yaññadatta Brāhmaṇakumāra (Jāt. IV. 30), Somadatta (Jāt. VI. 170). These become a regular feature in the period of Sanchi records, e.g., Aggidatta, Vāyu-, Yama-, Id- (=Indra-), Ṛishi- (=Isi-), Brahmā- (=Baha-), Upendra- (=Upida- or Upeda-), Uttara-, Vaiṣramaṇa-, Pushya-, Gaṅga- Dharma- and Nāgadatta, etc., (Cf. Bühler's List). According to Kātyāyana's Vārttika on I. 4. 58-59, Maruddatta would be equal to Marutta (Bhāṣya I. 341). Patañjali cites Yajñadatta and Devadatta as typical names of Brāhmaṇas (Bhāṣya I. 189), often shortened simply to Datta (I. 111).

12. As instances of particular names Pāṇini mentions Śeṅgala, Supari, Viśāla, Varuṇa and Aryamā (शेङ्गल-सुपरि-विशाल-वरुणार्यमादीनां तृतीयात् V. 3. 84). They formed the first part (*pūrvapada*) of names and the three endearment suffixes, *ika*, *iva* and *ila*, added after them caused the elision of all the syllables after the third. For example Śeṅgaladatta or Śeṅgalendradatta became Śeṅgalika Śeṅgaliya or Śeṅgalila; Suparyāśīrdatta became Suparika, Supariya, Suparila, and Viśāladatta became Viśālika, Viśāliya, Viśālila.

In the Jātakas the equivalent of Śeṅgala is Sīvalikumāra (I. 408), or the feminine Sīvalidevī wife of king Mahā Janaka (VI. 37). In the label of this Jātaka at

Bharhut Devī Sivalā is the form of the name (Lüder's List 709).

Instances of the use of Aryamā, Supari and Viśāla are rare. Varuṇa occurs as a common name in the Buddhist literature in the Kumbha Jātaka (V. 12) and elsewhere. Aryamā occurs only once at Bharhut as Ayama (Lüder's List 813). Aryamā was the name of an Āditya and Varuṇa was one of the Lokapālas or Mahārāja gods referred to by Pāṇini (IV. 3. 97) or was the name of a Nāgarāja.

13. Instances of names or virtually epithets given by reason of birth, were Gośāla, Kharasāla ( स्थानान्त गोशाल क्षरशालान्च IV. 3. 35) and Vatsasāla or Vātsasāla IV. 3. 36). Of these the only historical example is that of Gosāla, also called Maṅkhali, which perhaps corresponds to Pāṇini's Maskarin (VI. 1. 154). As a popular name it occurs at Bharhut (Lüder's List, 853).

14. Names ending in *putra*, and preceded by a masculine word ( पुत्रः पुत्र्यः VI. 2. 132), as Kaunaṭi-putra. They have initial acute accent ( आद्य उदात्त ). As counter examples of these are names preceded by the name of the mother, as Gārgīputra and Vātsīputra, and distinguished by the acute accent on the final vowel. The practice of adding feminine *gotra* name before *putra* is found in the Vamśa list of teachers in the Śatapatha Brāhmaṇa beginning with Samjīvi-putra (Vedic Index, II. 443). A Kātyāyanīputra (Jātūkarnya) and a Prāti-yodhīputra also occur in the Śāṅkh. Aranyaka (III. 10; VII. 13). According to Pāṇini one's designation after the gotra name of one's mother (*gotra-strī* implied censure (IV. 1. 147), because it was supposed that the mother's name would be adopted in the event of the father's name being unknown (Kāśikā, पितुरसंविज्ञाने मात्रा व्यपदेशो पुत्रस्य कुत्सा In the long Vamśa lists of distinguished teachers in the Śatapatha Brāhmaṇa, the addition of the

mother's name is a regular feature and must be defended on the basis of a well-recognised practice. Patañjali seems to attribute honour in being addressed by the mother's name, as Gārgīmāta, Vātsīmāta (III. 340). We know from inscriptional records that at least in the Sunga and Andhra periods the additional metronymics as वात्सीपुत्र वासिष्ठीपुत्र etc., were considered honourable personal names.

Female names are generally implied in sūtra IV. 1. 113 which Kāśikā illustrates by names like Śikshitā and Chintitā which are very unusual, and the same rule also refers to name of rivers denoting *apatya* or a descendant. The Varāha Grīhyasūtra offers the nearest parallel saying that the name of a girl should not be the name of a river, and that it should not end in *dattā* or *rakshitā* preceded by the name of a god (Kane, I.H.Q., 1938, 233).

#### B. Nakshatra-Nāma.

15. Pāṇini lays great emphasis on names derived from the names of stars (IV. 3. 34, 36, 37; VIII. 3. 100). According to the Grīhyasūtras a person was given a *nakshatra* name in addition to his popular name. According to Āpastamba the star name was kept secret and in the opinion of Gobhila the teacher was to settle a *nakshatra* name which the student was to employ when bowing at the feet of his teacher (अभिवादनीय नाम Gobhila Grīhya II. 10. 22—24). The Śāṅkhāyana and Khādīra Grīhyasūtras and also Mānava and Hiranyakeśa Grīhyasūtras agree with the above. It appears that originally the *nakshatra* name started as a secret appellation; but because of its convenient form came to occupy an equal rank with the *gotra* name, e.g., Moggallāna Tissa and other names in Buddhist literature.

Pāṇini treats of the star names specially elaborately. The general principle underlying these names was the fact of a person's birth under a star (तत्र जातः IV. 3. 25).

The general rule is that suffixes are frequently dropped when names are formed from *nakshatras* (IV. 3. 37), e.g., we have Rohiṇa from Rohiṇī. It is said (IV. 3. 34) that names of males (and females also) are derived from Śravishṭhā (=Dhanishṭhā), Phalgunī, Anurādhā, Svāti, Tishya, Punarvasu, Hasta, Viśākhā, Āshādhā, and Bahulā (i.e., Kṛittikā) without adding any termination, which had the effect of making the name of the star the same as the personal name. Examples would be Śravishṭhaḥ, Phalgunah, etc. In sūtra IV. 3. 37. Pāṇini states that from Abhijit, Aśvayak and Śatabhishak the terminations are optionally dropped (Cf. Kane, *ibid.*, p. 236).

As already remarked star names are rare in the pre-Pāṇinian literature. They are a regular feature of the post-Pāṇinian period, specially in the Buddhist literature and inscriptions. For example, Viśākhā, Punabbasu, Chittā, Poṭṭhapāda, Phaggunī, Phussa and Tissa or Upatissa occur in the Jātakas. From Sanchi we get Phaguna, Phagula, Tissaka, Upasijha (=Upasiddhya), Sijhā, Pusa, Pusaka, Pusini, Bahula (cf. Pāṇini's Bahulā), Sātīla (=Svātigupta or Svātīdatta), Asāḍha Mūla, Poṭhaka, Poṭhadevā (=Proshadevī), Rohiṇī or Rohā, etc. Bharhut adds Bharanideva, Anurādhā and Sonā (=Śravaṇā) to the above (LL. 758, 784, 874).

*C. Names with contraction of all syllables except the first two.*

16. Names ending in *ika* (V. 3. 78). A polysyllabic individual name was abbreviated in order to express affection. Only the initial two syllables were preserved and a suffix was added to them, e.g., Devadatta became Devika; Yajñadatta Yajñika. Chhadika may now, be explained as equal to Chhandodatta, and Chandika as Chandradatta; similarly Yaśika as Yaśodatta (LL. 757).

17. Names ending in *iya* (=ghan, V. 3. 79), added on the same principle as the first one, giving the forms *Deviya* (=Devadatta) and *Yajñiya* (=Yajñadatta). If we consider the material in the Jātakas we find *Giriya* (III. 322), *Chandiya* (=Chandakumāra, VI. 137), *Nandiya* (II. 199; same as *Nandika*, II. 200, or *Nandaka*), *Bhaddiya* (=Bhadrāsena, Bhadrakāra or Bhadrāsāla, I. 140; VI. 135), *Meghiya* (=Meghakumāra, IV. 95) and *Sabhiya* (VI. 329, =Sabhādatta). Names contracted with *iya* suffix are rarely found in Sanchi and Bharhut.

18. Names ending in *ila* (=V. 3. 79), denoting endearment like the above two, and regularising forms like *Devila* (from Devadatta) and *Yajñila* from Yajñadatta. The Jātakas have *Guttila* (II. 248), *Makhila* (=Makha-deva, Jāt. Nidāna, p. 41).

Some Sanchi names can now be explained as *Agila* (=Agnidatta), *Sātīla* (=Svāti-datta), *Nāgila*, *Yasila*, *Yakhila* *Sanghila*, *Buddhila*, and from Bharhut *Mahila* (Maha-Kumāra, LL. 766), *Yakhila* (Yakshadatta, 846) and *Ghaṭila* (Ghaṭakumāra, 860).

19. Names beginning with *upa* were treated as a special case in the opinion of Eastern teachers (प्राची) who formed the contraction by adding *aḍa* and *aka* (=vuch) to *upa* with the result that the whole name form except the initial *upa* was elided (प्राचामुपादेरडञ् वुचौ च V. 3. 80). Kāśikā's illustration is *Upendradatta*, which by dropping '*indradatta*' assumed the double from *Upaḍa* and *Upaka*. Other teachers favoured *Upiya*, *Upila*, *Upika* (V. 79-79) and also *Upendradattaka*. The Buddhist name *Upali* (I. 140) corresponds to Pāṇini's *Upila* and may be a contraction of *Upendradatta*. It is curious that in the Sanchi inscriptions the name occurs without contraction under various forms as *Upendradatta*, *Upidadatta* or *Opedadata*. Other names beginning with *upa* were *Upaka*, an *Ājīvika* (Jāt. I. 81) *Upakaṁsa* (Jāt.

IV. 79) Upakañchana (Jāt. IV. 305) and Upajotiya (Jāt. IV. 382). Upaka is a *gotra* name in Pāṇini (II. 4: 69) and Upagu and Upajīva occur in the Jaiminīya Brāhmaṇa (Caland 199, 249). But *Upādi* names are properly of the post-Brāhmaṇa epoch.

20. Names ending in *ka* :

- (a) To denote a sense of inferiority as Pūrṇaka, a servant (V. 3. 75). There always is a tendency for names of servants and low people to be shortened on this basis.
- (b) To form benedictory epithets (III. 1. 150) as *Jīvaka* (may you live), *Nandaka* (may you prosper), adopted as names.

*Later Trends.*—The system of contraction so elaborately dealt with by Pāṇini evolved still further in the Maurya and Sunga periods as indicated by the discussions in the Vārttikas and the Bhāṣhya. The following features may briefly be noted :—

- (a) Retention of the first four syllables instead of two as in Pāṇini V. 3. 83. Thus Brihaspatidatta became Brihaspatika, and Prajāpatidatta Prajāpatika. Pajaka in the Jātakas (III. 463) may be according to Pāṇini's rule of two syllables from Prajapatidatta or be equal to Prajāgupta.
- (b) Substituting *ka* suffix for Pāṇini's *ika* as in (16) above. Thus Devaka and Yajñaka stood for Devadatta and Yajñadatta. Pahaka (I. 40, Prabhākara or Prabhagupta), Sonaka (V. 247, Sonananda), Sachchhaka (VI. 478, Satyayajña) of the Jātakas follow the *ka* suffix. In Sanchi, of course, we have many names ending in *ka*, as Balaka = Baladeva,



Balarāma, Balamitra; Pusaka (=Pushyagupta), Dhamaka (=Dharmagupta), etc.

(c) Substituting *la* in place of Pāṇini's *ila* as in (18) above. This was allowed only after such words as ended in *u*, as Bhānula for Bhānudatta, and Vasula for Vasudatta. Bandhula (Senāpati of Kosala, Jāt, IV. 148) and Rāhula are specimens of old names conforming to this rule.

(d) *Pūrvapada-lopa*.—It was a revolutionary development and a counterpart of Pāṇini's *Uttarapada-lopa*. After dropping the first part of the name the same suffixes were added. It is also enjoined that no suffix may be added at all and Devadatta may become simply Datta or simply Deva. (Cf. also Bhāshya giving Bhāmā for Satyabhamā, I. 111). Pāṇini's Senaka (V. 4. 112), appears to be a Senānta name formed by dropping *pūrvapada* and adding *ka*. It also suggests the antiquity of the method of *pūrvapada-lopa* from the time of Pāṇini himself.

Carried to its logical conclusion a single name Devadatta would assume eleven forms, e.g., Devadattaka, Devika, Devila, Deviya according to the rules of Pāṇini; and Devaka, Dattika, Dattila, Dattiya, Dattaka, Deva, Datta according to the subsequent changes indicated in the Bhāshya.

*Resume*.—(1) In Pāṇini's time the system of having a personal name as distinct from *gotra* name had come into vogue. Persons of higher castes were asked their *nāma* and *gotra* separately (Cf. Jāt. VI. 2. 243, *nāma-gottañ cha pucchh* and king Virāṭa enquiring of Yud-

hiṣṭhira गोत्रं च नामापि च Virāṭaparvan, 7. 11). According to the Vinayapiṭaka even the Bhikshus in *pabajjā* were designated by *nāma* and *gotra* (B. C. Law, Pali Lit., I. xiii).

(2) Names ending in *mitra*, *sena*, *datta*, *śruta*, *karna* *śringa*, and names beginning with *upa* were primarily belonging to the Pāṇinian and the Buddhist epoch, although their use in the Vedic literature is not wholly unknown.

(3) The *Nakshatra* names discussed at length by Pāṇini are practically unknown in the Vedic literature, and appear as an exclusive feature of the period approximately beginning from the Buddha. The subsequent popularity of such names is also a noteworthy feature. The agreement between the *Ġrihyasūtras* and Pāṇini in the matter of star names is suggestive of mutual chronological relationship. The Baudhāyana *Ġrihyasēshasūtra* enjoining star names by mentioning the asterisms separately offers the closest parallel to Pāṇini (Asht. IV. 3. 34—37; Baud. I. 11. 9—18).

(4) The usage of contraction as applied to names of which Pāṇini takes such detailed notice is an essentially classical feature which is unknown in the Vedic literature and is unauthorized by the rules of the *Ġrihyasūtras*, but nevertheless forms such a common feature of the Buddhist literature of the period from the 6th or the 5th century B.C. That Pāṇini felt himself obliged to take note of the subject so thoroughly is an indication of its being well-established in the spoken speech in his time and prior to him and also over a considerable area as his pointed reference to the opinion of the eastern grammarians in the matter definitely shows (V. 3. 80).



**Reprint**

Reprint from the Dr. C. Kunhan Raja Presentation Volume

## PAINTING TERMINOLOGY FROM SANSKRIT LITERATURE

BY

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INDIAN literature is characteristically rich in terms relating to various fine arts (ललितकलाविधि, *Raghu*, 8-67). Painting (आलेख्य or चित्रकर्म) was specially close to the heart of the poets, and there are numerous instances of the art of colour-drawing or painting being used as a device to further the ends of the story. Such portions from classical Sanskrit poetry furnish us with interesting technical terms relating to Painting.

The picture gallery was called चित्रशाला (*Malavika*, Act I) or चित्रशालिका (*Tilakamañjarī*, p. 29) and painted homes are referred to as चित्रवत्सल (*Ragh.* 14. 25). The *Uttararāmacarita* (Act I) refers to the gallery as वीथिका in which paintings on walls were painted (अभिलिखित). In this case the whole Rāmāyaṇa story was illustrated in a series of narrative panels and some of the scenes painted were extremely realistic, so much so that Sītā had once to be reminded that it was a picture and not a scene from life that she was looking at (अयि चित्रमेतत्). An hour spent in the picture-gallery is called चित्रदर्शन. Both according to Bhavabhūti and Bāṇabhaṭṭa looking at and painting of pictures were means of diversion (विनोदार्थ), and sometimes kings and nobles entertained themselves by cultivating painting as a hobby (आलेख्यविनोद). The noble king in the *Tilakamañjarī* devotes whole days in examining painted portraits of beautiful maidens from far and near—

कदाचिदङ्गनालोल इति निपुणचित्रकारैश्चित्रपटेष्वारोप्य सादरमुपायनी-  
कृतानि रूपातिशयशालिनीनामवनिपालकन्यकानां प्रतिबिम्बानि परित्यक्तान्यकर्मा  
दिवसमालोकयत् । (p. 18).

The wall-paintings are referred to as भित्तिचित्र in Classical Sanskrit *Tilakamañjarī* (p. 71 ; 179) which term more or less must correspond to what we usually understand by fresco-painting. In the *Vinaya-piṭaka* (III. 36) we find a more expressive term in लेपचित्र(लेप्यचित्र) for paintings on plastered walls. In the *Mahaummaḡa Jātaka* the great tunnel having brick walls worked over with stucco (सुघाकम्म) was adorned with all manner of paintings done by clever painters, and its timbered roofs smeared with cement (उल्लोकमत्तिकां) and whitened (सेतकम्म) were beautiful with full-blown lotus-flowers—a description which brings to mind the concentric bands of lotus designs on ceilings in Cave II and XVII at Ajanta.

The *Malavikāgnimitra* refers to master-painters as चित्राचार्य (Act I), and the *Tilakamañjarī* of Dhanapāla designates them with the honorific title चित्रविद्योपाध्याय (p. 177) who must have also worked as talented exponents of art to a crowd of gifted students attached to them as pupils. The discriminating citizens who cultivated a taste for fine arts specially painting, are referred to as आलेख्यशास्त्रविदनागरलोक. Some of them were practical connoisseurs well-versed in the theory of æsthetics (चारुत्वतत्त्व, *Tilaka*) and therefore competent to act as judges of pictures. Dhanapāla also uses the general term चित्रकार for a painter (p. 179), and the *Medinī* gives वर्णाट, a colour-expert, as the synonym of चित्रकार, and the *Nanārtharṇavasamkṣepa* adds रंगाजीवः to it (III. 520). The latter uses the term कारुज (literally, produced by an artist) for a picture done by a workman (शिल्पिनां चित्रे), which only shows how much more common were pictures amongst all other creations of the artists. The brush is called तूलिका in the *Kumārasambhava* (I. 16) and the colour pencil was known as वर्तिका. The word लेखनी also occurs as a synonym of चित्रतूलिका

(*Nanāartharṇavasamkṣepa*, II, 1572). Skill in the use of the colour pencil is referred as वर्तिका-निपुणता. Several kinds of colours were in use and most of them were prepared from different coloured earths or stones. The inorganic colours were found to be more lasting, and their use is referred to in a casual dialogue in the drama *Nāgananda*.<sup>1</sup> (Act II)

*Hero*—Friend, let me divert myself by painting the dear one on this slab. Bring you please from yonder rock a piece of red arsenic (मनः शिला).

*Vidūṣaka*—As you desire. You ordered, O friend, for one colour only; but look, here have I brought five varying pigments readily picked up from amongst rock pieces on the spot.

This piece of information (7th cent. A. D.) contemporaneous with the work at Ajanta, is on that account extremely valuable as it suggests the probable source of the beautiful permanent colours from coloured stones used in executing those wonderful paintings. Mixing of colours for painter's work is referred to in a poetic way by Bāṇabhaṭṭa as चित्रकर्म-सुवर्णसंकराः which surely has reference to the preparation of secondary colours from basic tints.

The artist first drew the picture in outline called रेखा (*cf.* दयितामुखस्य सुखयति रेखाऽपि प्रथमदृष्टेयम्, *Nāgananda*). The outline was generally done in red chalk called गैरिक. The Yakṣa in speaking of the attempted portrait-painting of his wife says:—

त्वामालिख्य प्रणयकुपितां धातुरागैः शिलायाम् ,

(*Meghadūta*, II. 42), *i.e.* the painting is drawn with the help of the mineral colours (धातुराग) which according to Mallinātha included गैरिक and others. The use of the mineral paints

<sup>1</sup> नायकः—वयस्य जाने तामेवास्यां शिलायामालिख्य तथा चित्रगतयात्मानं विमोदयामीति ।

तदित एव गिरितटान्मनःशिलाशकलान्यादायागच्छ ।

विदूषकः—यद्भवानाज्ञापयति । भो वयस्य, त्वयैको वर्णक आह्वतः, मया पुनरिद्वैव सुलभाः पञ्चरागिणो वर्णा आनीता इति आलिखतु भवान् ।

(धातुराग) however stands clearly emphasized. In speaking of the technique at Ajanta, Mrs. Herringham writes: "The ground of these ancient paintings having been prepared, the artist then proceeded to sketch out his own composition in a bold red line-drawing on the white plaster. The scheme was drawn out in red." In Sanskrit this would be like saying—

धातुरागेण रेखाभङ्ग्यः क्रियन्ते स्म.

Sometimes the outline was drawn with a black chalk called कालाञ्जनवर्तिका (cf. रूपालेख्योन्मीलनकालाञ्जनवर्तिका in the *Kadambari* describing the श्मश्रुराजिलेखा of चन्द्रपीड, Vaidya's Text, p. 267).

The portrait is referred to as प्रतिकृति which was distinguished by extreme likeness to real form (सुसादृश्य). But the picture, whether a portrait or an imaginary one, must always first be a mental conceptional (मनसाकृत) with the artist, for he transfers to the canvass what he first creates as a mental image (संकल्पस्थापितं पुरः) [*Nāgānanda*, Act II]. In painting a portrait from memory the painter has to work on the basis of his own mental impressions of the likeness (भावगम्य सादृश्यलेखन, *Meghadūta*, II. 22).

The aesthetic appreciation of a good picture was based on the following three points. The remarks of Duryodhana in the *Dutavākya* in describing the द्रौपदीकेशाम्बरकर्षणचित्रपटः are very apt in this connection—

- (1) Colour scheme (वर्ण)—अहो अस्य वर्णाढ्यता, (wonderful is the richness of its colours).
- (2) Expression (भाव)—भावोपपन्नता, ('Oh, the propriety of its expression !)
- (3) Drawing (आलेखन)—अहो युक्तलेखता, ('Oh, the surety of lines in it !)

Kṛṣṇa sums up his reaction to the same picture in a short dignified remark—अहो दर्शनीयोऽयं चित्रपटः, 'Truly lovely to look at is this picture.'

The female figurines painted in a picture or on canvas are referred to as चित्रपुत्रिका (*Harṣacarita*, N. S. edition, p. 165; *Tilakamañjarī*, p. 162). In the *Udayasundarikathā* of Sodḍhala it is called लेख्यपुत्रिका (p. 96). The painted figure is आलेख्यगत or चित्रापित. The painting of foliage and creeper designs was called पत्रलेखन, lit. 'writing of leaves', the designs being called पत्रलता, पत्रावली or पत्रांगुलि. The root लिख् has been specially used as a technical term for 'painting' in Sanskrit literature. Kālidāsa sanctifies its usage in a beautiful line of the *Meghadūta* (II. 17). The Yakṣa directs the Cloud Messenger to identify his home in Alaka by the figures of शंख and पद्म painted on the door jambs of the entrance—

द्वारोपान्ते लिखितवपुषो शङ्खपद्मौ च दृष्ट्वा ।

Harṣa also uses the same root in the *Nagānanda* :

एवं नाम रूपं लिख्यते,

'You paint such beauty!'

In the medieval period the painting of scenes and portraits on cloth or canvass seems to have been much in vogue. According to *Medinī* the word पट had become synonymous with चित्रपट.<sup>1</sup>

Painting was made either on a rectangular or a square board (चित्रफलक, *Tilakamañjarī*, p. 163), or on a big cloth folded as a roll, for which the significant name was कुंडलित पट (*Udayasundarikathā* of Sodḍhala, p. 51). The unfolding or spreading out of the roll is referred to as प्रस्तारित (*Tilakamañjarī*, p. 162) or more appropriately उद्देहित (*Udayasundarī*, p. 51, सर्वं कुंडलितपटम् उद्देह्य). Such painted rolls were preserved in appropriate covers made of costly Chinese silk (प्रकृष्टचीनकर्पटप्रसेविकायाः सयत्नमाकृष्यचित्रपटमेनमुपनीतवान् । *Tilakamañjarī*, p. 164, i.e.,

<sup>1</sup> In the north Indian dialects of Hindi the continued use of लिखना in this specialised sense is found even today. The female potter uses the idiom बासन लिखना for painting figures on pottery.



carefully took out the roll from inside a bag of excellent Chinese silk and presented it to the king).

Fortunately we have still preserved for us three descriptions of roll paintings on cloth (चित्रपट) in late classical literature. The first occurs in the *Skānda Purāṇa*, *Kasikhaṇḍa*, ch. 33). Kalāvati who was in her former life the daughter of Harisvāmin, a learned Brāhmaṇa of Benares, is in her next life born in the house of the ruler of Karṇāṭa. One day a dealer brings to her an elaborately painted roll which consisted of a चित्रपट of काशी, portraying the city as it then stood, in the most detailed manner. The sight of the painting revived subconscious memories in Kalāvati's mind, and she began to name and identify in the picture all the sacred spots and temples of the holy city. The list is a beautiful literary device of the author of the Purāṇa to introduce a detailed account of the Sivaliṅgas and other holy temples of Benares. Elsewhere the same Purāṇa eulogises the making of painted scrolls with figures of gods and goddesses. Sīvas'armā, a learned Brāhmaṇa of Mathurā sorrowfully accuses himself for having neglected the pious duty of getting Gaurī and Mahā-lakṣmī painted on चित्रपट (*Kasikhaṇḍa*, ch. 7). Such religious rolls were either used for personal worship or presented to temples. We meet with a lengthy account of a *Citrapaṭa* in the *Tilakamañjarī*, a romance of Dhanapāla (a court poet of Muñja and Bhoja of Dhārā, 11th cent.)

An excellent scroll (दिव्यचित्रपट) is brought to Prince Hari-vāhana by his Pratihārī who obtained it from a young painter named Gandharvaka. The king having heard of its exceeding beauty (सर्वातिशयिचारुत्व) hands it to the attendant flywhisk-bearer, with the remark: भद्रे, किमत्र लिखितम्. She spreads out the painting before him (विस्तारिते पुरस्तात्तत्र) and the Prince sees in it a beautiful maiden in the form of a painted figure—

कन्यकारूपधारिणी चित्रपुत्रिका

He also observes closely her beauty from head to foot in great detail (मुहुः . . . . कृतारोहावरोहया दृष्ट्या तां व्यभावयत्). The clever painter

of this rare scroll, who had come with it from a distant quarter, is also soon ushered in the presence of the Prince. He who had painted that divine beauty (दिव्य कुमारिका रूप) with extreme care (सप्रयत्न) modestly asks: 'Prince, Does this scroll show something worth seeing? Does not some perceptible fault obtrude too much in it? My own skill in the painter's art not being yet perfect, please deign to instruct me with your gifted knowledge of theory and practice in this art—

‘कुमार, अस्ति किंचिद् दर्शनयोग्यमत्रचित्रपटे रूपम् । उद्भूतरूपः कोऽपि दोषो वा नातिमात्रं प्रतिभाति ।

अद्याप्यनुपजातपरिणतिश्चित्रविद्यायां शिक्षणीयोऽहमखिलकलाशास्त्रपार-  
गेण महाभागेन ।’

The Prince on his part already struck with the excellence of the picture bestows praise on the youthful painter and says, 'Thy proficiency in brush work (चित्रगति) seems to have come to thee from past life. You seem to be the very creator of this art in this world. What a beautiful pond fringed with many a tree and abounding in golden lotuses have you painted on the top of this mountain which rises high in gradual ascent? Here are lovely groves all round on its banks. Here strolling on its golden sands and surrounded with her female friends is this maidenly figure of such matchless beauty, so perfectly painted (सम्यगभिलिखिता) with the combination of colours properly arranged (यथोचितमवस्थापितवर्णसमुदाया), and the light and shade effects distinctly reproduced (प्रकाशित-व्यक्त-निम्नोन्नत-विभाग). Look at the winged birds and pairs of deer, activated into life at being disturbed by her attendants (साक्षात् सचेतनानीव प्रकाशितानि). In many a proper place are painted figures of female attendants all intent on their duties. Crowning above all, in the centre of the sky is the lunar orb shining in full glory on a full-moon night. Following her closely with a golden cane in hand is her betel-bearer, now warding off the officious cranes, then offering a betel-leaf in her open palm. In short, whatever painted form I see here, adds to the beauty of the

painting' (किं बहुना, यद्यदवलोक्यते तत्तत्सर्वमपि रूपमस्य चित्रपटस्य चारुता-  
प्रकर्षहेतुः, p. 166).

'Only one flaw do I notice in it—the absence of a single male form in the whole composition leaves its beauty rather incomplete. But that can even now be remedied and you may still have chance to demonstrate your comprehensive mastery of this art.' The painter takes the cue and rising to the occasion offers to paint the Prince himself to complete the picture. At this stage he reveals identity of the painted beauty—she is Tilakamañjarī herself, daughter of the great Vidyādhara, lord Cakra-sena. She, having remained unmoved by the pangs of love in her youth, had declined to marry, till at last her mother thought of a strategem to be realised through her friend Citralekhā. The mother says, 'Thou art so skilled in brush work, O Citra-lekhā, and thy friend Tilakamañjarī is so fond of looking at pictures (चित्रदर्शनानुरागिणी). Why not show her, gradually starting from the pictures of her near ones, the true likenesses (विद्मरूपणि) of all the beautiful princes in the land, each named individually (यथास्वमङ्कितानि नामभिः), and recount in glowing terms their virtues and beauty?' The suggestion is at once accepted and wise Citralekhā deputed skilled masters in all directions (तदैव क्षणे विसर्जिताः सर्वदिक्षु दक्षाश्चित्रकर्मणि).

Her own son Gandharvaka, a youth of fifteen years and highly accomplished in the art of painting, is sent on a special mission to Suvelagiri in Simhala, and it is on his way that the youth finds himself in the presence of the Prince with the excellent portrait of the prospective heroine described above. While promising to add the male figure of the Prince in the picture as best as he could, the painter makes the significant remark:

चित्तैकाग्रतातिशयनिर्वर्तनीयचित्रम्

*i.e.* only with extreme concentration of mind can a successful picture be painted (p. 171).

The description of the चित्रपट in the *Udayasundarikathā* (first-half of 11th century) furnishes some interesting terms.

The scroll is simply called पट which confirms the evidence of the *Medini* in recording पट as a well-understood synonym of चित्रपट. The picture was rolled in the form of a scroll which was significantly called a कुंडलितपट. It consisted of more than one piece of cloth as, on opening it (उद्देलन), the king detected a seam or joining line between the first and the second piece—

अये सन्धानरेखया मेलित इवापरोऽयमुपलक्ष्यते पट इति कुतूहलात् सर्वमुद्देल्य, p. 52.

The first canvas contained a portrait of the king himself and the second that of a beautiful princess who was to be his future queen. The picture belonged to the king's commander-in-chief (सेनापति पंचालसिंह) who constantly possessed it for a specific purpose, *viz.*, to use as a ध्यानपट.

Here we have an important word which must have been used to denote a painted cloth bearing religious figures of deities whom the devotee worshipped. The pictures of Gauri and Mahālakṣmī on painted cloth referred to in the *Skanda Purāṇa* as shown above must have been of the nature of *Dhyānapaṭas*. The background of the scroll was white (ध्रुवलितपट and सितप्रभासंभारशालीपट), and on it several colours were used in executing the picture (प्रपञ्चितानेकवर्णा चित्रगता युवति). The outline picture is called रेखामयीमूर्ति, and the sketching of the form in fine line सुरेख वपुस्.

It appears that the verb लिख् was used more often for sketching or for outline drawing (केनैतत् लिखितं). The compound colours were probably meant by the term वर्णकौष in the preparation of which some liquid was used. Reference is also found to the use of non-coloured ink (अमलमयी) in painting the forelocks (कुन्तलसंहति), probably the use of silver and gold colours met with in miniature paintings of the Apabhramsa period (11th-15th century).

The beautiful coloured designs on the floor were given the technical name of रंगावली (modern रंगोली). The word occurs

both in the *Yasastilakacampū* of Sōmadeva (10th century, Vol. I, 133, 350, 369, Vol. II, 247) and the *Udayasundarikatha* (11th century). In the latter, the city of Indivara is compared, first with a set of रंगावली designs sketched on the floor of the earth (रङ्गावली वलयमिव प्राङ्गणभुवः) and second with a picture painted on a wall (चित्रमिव भित्तेः). The latter simile is suggestive of the fact that sometimes whole cities were represented in paintings on walls, specimens of which are still preserved in the wall-paintings inside the Amber palace of Raja Mansingh depicting both Benares and Ayodhya as they stood in the 16th century.

Somadeva on the other hand refers to designs worked permanently on the floor by fixing coloured stones in patterns रंगवल्लीमणीन्. The background was known as परभाग and, in one passage, Somadeva refers to the devising of appropriate backgrounds to set off the *Rāṅgavallī* designs (रंगवल्लीपरभागकल्पनम् *Yasastilakacampū*, Vol. II, 247).

॥ श्रीः ॥

ON

THE URGENT NECESSITY OF WRITING

THE HISTORY OF SANSKRIT LITERATURE

FROM THE

INDIAN STANDPOINT

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BY

SHRIDHAR GOVIND KALE, M. A.

GWALIOR.



SHRIDHAR GOVIND KALE, || ST-1 ||

M. A.

Vinchurkar Goth,  
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To,

Dr. R. C. Muzumdar M.A.P.S.

Bharatiya Vidya Bhavan

33-35 Hornby Road  
Gandhari Bombay

Dear Sir,

There is quite a good number of useful and good histories of Sanskrit Literature available. But it has always appeared to me that they are written or modelled on the Western critical and analytical plan. They do not properly bring out the essence, or what is of permanent value in it, namely, the growth of our proud culture. In the accompanying printed lines, I have put down my thoughts about this matter. I shall feel grateful if, without paying much attention to the language of the presentation, you will kindly let me know what you think of the question in all its aspects, including the possibility of co-operation of scholars, the financing of a scheme for the purpose, etc. In the light of the criticism of my views, I desire to place the subject before the public or before the ensuing Oriental Conference, if possible for their consideration.

An early reply from you will oblige.

Yours

*Sincerely*  
*S. G. Kale*  
21-7-46





## FOREWORD.

**O**URS is a very ancient country, with one of the oldest and a very highly developed culture. A study of the physical sciences to-day shows us that there is a complete unity and uniformity in the physical world in spite of the apparent variety. A proper study of our old literature — Sanskrit Literature — will reveal the oneness of the spiritual law, ideas and action ; and only Indians can interpret it in its real light. To bring out the soul of Sanskrit Literature, our own scholars must write its history. The need for such a history in to-day's materialistic world is great, and it can only be satisfied by a special effort of a willing Institution, existing or new.



॥ श्री ॥

# THE HISTORY OF SANSKRIT LITERATURE

( to be written in India for Human Advancement )

‘ एकं सत् ’

—ऋग्वेद.

**TRUTH IS ONE.**

—0—

“I am deeply conscious of India's contribution to the mental, cultural and spiritual life of mankind and I want for my country the opportunity for sharing in your rich heritage and of gaining continued inspiration from your great men and women.”

— Pethwick-Lawrence

The Secretary of State for India. 1946.

Man is a social being. He is very fond of intercourse and company. The intellectual part of this instinct he fulfils by speech and language. The most intense and common experiences leave behind them their impressions on the mind of man which are recalled by means of words. These words and the things and feelings they express form the genesis of the human language. Language composite comes into being when man is able to live in groups, continuously, over a great span, absolutely free from care of food, housing and clothing. Man forms notions about himself and his relations, towards his surroundings and his friends. He feels intensely. For the exchange of feelings words have to be kept from being lost in the void. The plan of writing is the remedy. Language and literature, then, have the power to create the same feeling in the reader and the hearer, with perhaps the same intensity as was first experienced by the feeler himself.

As man collectively grows into society; his speech and writing also grow automatically to express very complex experiences and feelings. This creates the literature of particular groups of men called in modern times the nations. A Group of men and its language with its literature are ever correlated as is the soul and the body in one person. The literature is the picture of the inner soul with its vast and deep experiences as the effect of impact with its surroundings, “given a local habitation and a name” for contact with the part of humanity to come in future. Literature, then, is the contact with futurity, with the generations to come. It is the intellectual wealth of experience as the heritage for future generations. “Great literature is an examination, a projection of the social soul, revealing its profundities to itself. And it is by literature, rather than by any other means, that the men of one generation stamp the impress of their persona-

lities on the generations that succeed them." So says one American thinker. (Page 17. International Relations, By Reymond J. Buell.)

Though literature is born with man and is as old as he is, its artistic forms, which directly appeal to us, are only those which are our immediate predecessors in time and place; those which we are able to grasp and appreciate or those that have the potent power in moulding our inner life. As parts of the Infinite we have and must have our communion ever, with every movement of the same, in space and time. But as a matter of fact we are circumscribed; the Infinite is, as it were, hidden from us. We live as nations and nationalities and as generations young, old and older. The more we grow large-minded, the more we open from inside out; the literatures and their histories also, which reflect our inner soul with and within the body, will vibrate the natural tune, will lead to the same philosophic calm, will reach us to harmony, unity and peace. But that situation is yet to come; it is in progress. One perfect embodiment of such life and literature is Veda already formed.

Luckily for us, man has assimilated in himself the power given to his hands and feet by steam, electricity and magnetism. He is trying to attain the balance temporarily disturbed by a little insolence of possessing astounding physical power, blinding even the soul for a time. But there is a happy augury. Leaders of thought feel that all men on earth are one and can live and be as one, happy, joint family. This is considered the necessary condition precedent of an ASHVAMEDHA of the Sanskrit people. For the present, in the intellectual arena man is studied nationwise or language-wise; and Greek, Latin, French, English, Spanish, Russian, German, Arabic and Persian are looked upon as leading and great languages and literatures. Their time span is only two to three thousand years. Christ or Mohammad is seriously and sincerely taken to be the starting point of time in the awakening of thought. This conception of B. C. or A. D. scientifically speaks of the instinctive tendency of man to consider time to have a beginning for him when he is intellectually awakened. Otherwise Scientists know clear enough that time is infinite both ways, past and future.

The literatures of the European nations are easily within range in regard to the view of human life they take, as they extend over only three thousand years in respect of time and deal with subjects for which man struggled in this period. Prof. F. B. Jevons says that stages in the development of literature correspond with those of the nation's life. In his view, "Land and language, race and place, the community to which the author addresses himself and for whose approbation he looks, the means by which he addresses it, the literature which existed before him, all these things help to

determine the direction which the genius takes; and the operation of these and other causes on the literary genius of a nation constitutes the history of its literature." In his opinion the History of Greek Literature can be summed up in these successive forms viz, epic, lyric and dramatic Poetry and historical, oratorical and philosophic Prose.

In the history of Latin literature Professor G. A. Simcox finds the ground a little changed and grown more difficult. He says;—"An ideal history of anything would tend to be a history of everything: whether the primary subject were letters, institutions, manners, wars or arts, the same figures, the same facts would present themselves over and over again in slightly different lights." "There are other difficulties less directly due to our ignorance. How shall we separate what belongs to biography, what belongs to philosophy, what belongs to history in the narrower sense from what belongs to literature?" "When we come to literature mainly Christian, it is far more puzzling to draw the line between the history of literature and the history of theology, than it was before to draw the line between the history of literature and the history of philosophy."

Greek and Latin are considered the classical languages. The life, they primarily represent, which evolved when the people flourished, is considered the basis, in Europe, of the ideas of justice, law and morality and all that is deemed to be the ideal and beautiful. To the scholars of the Universities of Europe under Athens, Rome and ahead, Sanskrit was not known much or not known at all. In the middle ages, the histories of the German and French literatures, reflect the struggles through which the German and the French were passing. Dr. Kuno Francke remarks that the fundamental conception which underlies the account of the development of German literature is that of a continual struggle between individualistic and collective tendencies, between man and society, between personality and tradition, between liberty and unity, between cosmopolitanism and nationality, a struggle which may be said to be the prime motive power of all human progress. K. T. Butler thought in a different vein. "Literature and Life" she says, "are very closely connected, so much so, that one can form no fair estimate of a literature without some knowledge of the conditions which produced it." "Social literature aims at showing society not only the way it is going but also the way it should go" In France the cloister and the university, the castle and the town were the centres where literature thrived, but at each place in different ways and for different purposes.

Goethe, Dante and Shakespeare gave a wonderful lift to the European thinking world of their respective times by their extraordinary thinking and deep experience of the feelings of man exhibited in the appealing, simple

but heroic way all their own. The discovery of America and a way to India advanced knowledge, and the use of printing, steam, electricity and magnetism had their widening effect on the literatures of Europe in creating new questions and struggles, and in liberating the soul the more. Europe has become one conjoint, compact and uniform whole for economical and even political common actions as against non-Europeans. But in itself Europe sought deeper contact and fusion of ideas. New forms of literature came into being. The outlook widened. Essay is the form that came into prominence and became highly cultivated. Books sprung up in harvests of fiction. Histories of literatures too became the more serene and of deeper form to express and examine the common tendencies and fountains of higher feeling and higher action. International intercourse of ideas became necessary and important for peace and advancement. In the middle of the last century in 1845, in America, at Concord, Thoreau declared that it would be worthy of the age to print together the collected scriptures and sacred writings of the several nations, the Chinese, the Hindus, the Persians, the Hebrews and others as the scriptures of mankind. Max Muller conceived the idea of publishing the text and translation of Rigveda this very year. The Oxford University Press published the Sacred Books of the East translated by various eminent scholars. All this was preparing the ground for the advent of Sanskrit in the field of European thinking. Though the approach was through the Persian and the Arabic in the translations of the fairy tales and fables of the Panchtantra and Hitopadesha, Sanskrit attracted the attention of all the great scholars of Europe. It gravitated great minds like Max Muller, Roth, Pischel, Geldner, Griffith, Thibaut, Colebrooke, Goethe, Monier Williams, Jones, Keith and Macdonell. Though through translations, they studied the Sanskrit thought, first for its long continuity, then for its knowledge and inspiration in philosophy and sciences and finally with a view to looking for a way of solution of the problems that were troubling on all sides. Philology came to be studied as an altogether new science and it established beyond doubt the close relationship of the Aryan group of men. Macdonell wrote the first sentence of "A history of Sanskrit Literature" thus:—"Since the Renaissance, there has been no event of such world-wide significance in the history of culture as the discovery of Sanskrit literature in the latter part of the eighteenth century." Candidly enough he closed the book with the remark:—"The intellectual debt of Europe to Sanskrit literature has thus been undeniably great: it may perhaps become greater still in the years that are to come."

That Sanskrit was given a place of importance, worth and honour in the kind of the higher writing styled the histories of literatures by scholars

like Edmond Gosse, is itself a proof of the higher level of social and spiritual studies reached by European thinkers and scholars. The chief idea at the root of writing the histories of literatures, is to help the advancement of knowledge, mainly spiritual, philosophical and sociological through the vast experience of brother groups of peoples called nations, in the inter-relation and sequence of the time factor. The history of a literature has no meaning if it loses its touch with the life positively lived by the group or the nation. It is again a part of the great history of man, seen and studied through the exhibition of the growth of his thought in the field of speech and then language and its developments. Prof. F. B. Jevons finds that the more complex civilization grows and the longer the past which any generation is heir to, the more difficult it is to distinguish the causes which substantially affect the revolution of literature from those which do not. It seems that this fact applies to a very great extent in regard to Sanskrit literature.

Edmund Gosse claims that in the histories of literatures under his direction "Literature will be interpreted as the most perfect utterance of the ripest thought by the finest minds and to the Classics of each country rather than to its oddities and rather than to its obsolete features, will particular attention be directed." Macdonell followed this direction to the best of his knowledge in regard to the history of Sanskrit literature. But here came some inherent extraordinary situations, which unconsciously led him to commit mistakes of conception and understanding resulting in a picture of Sanskrit and its growth not true to nature. He had a bias to write primarily for those young men "who leave these shores (English) to be its (India's) future rulers." He did not write it as a part of the history of man, in the most scientific and broadest sense. The time span of 5,000 years, at the most, is very small indeed and to encompass all the great vicissitudes of the Aryans. The Punjab and the Ganga valley are the places where the latest phase of Aryan life thrived. But the starting from the Meru mountains and spreading over other continents, is not clearly given in the history of Sanskrit literature in relation to the location of all occurrences. The factors of time and place being not perfectly right in this way, we are further led to see the discrepancies in regard to the matter and arrangement of the subject also.

Though an ardent scholar and a lover of Sanskrit, Macdonell was led to narrow views in regard to time, place and circumstance of the study of Sanskrit as the natural consequence of the idolum of his place, time and circumstance. The misconception of considering Europe as the place of greatness in humanity, represented by Greece and Rome in ancientness, accompanied by the idea of connecting and reckoning all knowledge from, after or before the birth of Jesus Christ, has inadvertently dragged him into



misunderstandings of wrong comparisons and consequently unfounded conclusions. He knows only two prime divisions of literature, viz. Prose and Poetry, dependent on the style and outward form just after the divisions of the Grecian literature, and takes Rigveda to be poetry and Yajurveda to be prose compositions. In Sanskrit the different Vedas have their subject matter clearly well-defined, circumscribed and accurate, as also the emphasis on the seers of them together with their utility in life and sacrifice. "The chief significance of the Vedas lies in their mythology and that of the Brahmanas in their ritual" says Macdonell (page 33) This remark is vague enough. As a matter of fact Vedas and Brahmanas are so intrinsically connected that both mean one united whole knowledge of the chief action of life, and they cannot be separately studied and known from each other, A number of examples of misconceptions can be given from the first chapter. The paragraph on page 10, beginning from "History is the one weak spot in Indian literature" is a very bold instance of wrong conception and conclusions. His idea of the succession of the Vedas as Rik, Yajus, Sama and Atharvana, coming chronologically in existence, one after the other, is unscientific and historically untrue as references to each other in many or all of them do conclusively show that Vedas, Brahmanas and Upanishads were coming into being simultaneously and in due course with the great uplifts in the life of the Aryans. The classification of the lore of the Aryans in Veda, Brahmana and Upanishadas is a very advanced stage in their development. It shows clearly their acuteness of thought and its natural classifications in accordance with the worth, utility and spiritual level. If history is to be traced, as we must, it must be traced with the great upheavals in the life as a whole. social, political and then as the gist of both, religious, civic, rural, moral and economical, as reflected in the literature. The greatness of life and greatness of the relative literature ever go hand in hand. They can never be scientifically separated. To ignore the greatness of life historically and at the same time to try to praise the literature of a nation is practically damning it with faint praise.

The present minute, suggesting the necessity of writing a history of the Sanskrit literature at the hands and with the full co-operation of the Indian scholars who are its natural inheritors, is not the proper place to deal in extenso with all the weak points in the work of Macdonell. Suffice it to say that he ignores the most important basic conception of the Vedic literature. He feels however, that he comes to a different world altogether from the grand Vedic life literature and culture, when he opens chapter X (The Epics) at Page 277. He remarks:—"In turning from the Vedic to the Sanskrit period, we are confronted with a literature which is essentially different from that of the earlier age in matter, spirit and form."

Sanskrit literature, especially the Vedic, as it is, exhibits the perfect history of humanity scientifically, from imaginably ancient times. Wise thinkers see it. Human life, individual, corporate and social, has progressed with the amplitude of food and water and domesticated the dog and the cat, the horse and the ox, the fowl and the bird. The discovery of fire, first as the arm of protection from wild animals, like the lion and the tiger, and further as the agency to give light in darkness, comes to him as a boon extraordinary from the heavens as it were. He first wandered about far and wide, saw the vastness of the skies and went into the depths of the earth. The eye saw, the ear heard. The mind registered the experiences. It was found that the experiences spring up again to the mind in calmer and introspective moments. This great finding is the beginning of knowledge. Speech came next for intercourse and expression of feeling to the complementary individual, the mate. Progress on all sides was surging up for millenniums. There came the home, the family. Knowledge gradually became deeper, more accurate and analytic. It came to be Science. To recall the pleasures of the happy thought once experienced as also to suggest a thing absent, man planned some signs. These gradually developed into writing. Time was running on in millenniums. Thinking, writing, singing dancing, discussing, comparing and philosophising gradually was matured into something that is termed literature. Progress was all-sided, uniform and correlated, Sciences and Arts themselves developed to their great heights,

Institutions political and social then came in so as to fit in with the new stages of progress one after the other. Time was all the while running its course of millenniums. Political unities and moral standards rose to be perfect ideals of the one kingdom of the whole earth limited by the oceans, and of truth and faith to the Maker in the heart and outside.

Great thoughts sprung up and by their inherent truth and power got permanent life in human mind. These were registered and a vehicle was arranged to use them as the nucleus of inspiration again and again by incorporating them in rituals, in Yajna (sacrifice) details and in Upanishadas, every one at its proper and natural place. We have to study and present such stages of progress in the vastness of time, in the Vedas, just as we climb the terraces of the Himalayas one above the other. We naturally then reach the Gouri Shankar, the highest peak in human thought in the philosophy final, or the Vedanta.

In its own mysterious way, the Veda exhibits one full, complete, perfect cycle of the life of man on the surface of the earth historically, sociologically and philosophically. It is seen wound up round the institution of

**Yadna or sacrifice.** Historically, man is seen springing up from his animal life to form groups, towns, and nations of relations, friendly or inimical. Kings are seen fighting and extending their sway. The whole life is found to have reached the highest stage, as it were, on the banks of the Ganges on the Indian plains in having the sway of the whole known earth with the Ashwamedh sacrifice. Sociologically, we find man first grouped with the family of the mate and the issue, and further developing into clan, caste, village and nation. There are inter-state relations after wars and treaties. There are laws of all these institutions. Finally there is the Swarajya and Vairajya etc. culminating into a perfect joint polity of the whole earth encircled by the seas. Philosophically, Man is found in the Veda to be looking before and after, to be looking in and out. He sees his relations with the surrounding earth, water, fire, wind and ether. What is he? How is he formed? Who regulates the universe outside and equally vast universe inside? He reaches the highest stage when he realises that all is one-man, the surrounding universe and the Maker of all. Scientists know that though every particle of the world is changing, it certainly changes under definite laws. The forms change but the inner principle, the truth in them, does not. It persists. As the Veda this way suggests the truth of human life, it is natural that it may become the guide for all.

On the surface of the earth for man, perhaps for all times, the Veda is therefore, the source of all knowledge and guidance, of course, if properly studied and understood. It is one composite whole of the three great parts (1) Samhita (2) Brahmanas and (3) Upanishadas. It is the medium of a world religion at once natural and scientific. It is unique in every way. To compare it with something else is partially to blind oneself. Macdonell could not do justice to it because of his limitations. The ordinary method of exposition applicable to ordinary literatures of the world of the present times, written with the ordinary usual aim of giving the names of authors and writers in certain centuries chronologically with a little summary of what they had said and done, for the instruction of the readers cannot suffice here. Nations and nationalities are just like "children, playing in the sands on the seashore of time, building little castles and breaking them".

Macdonell wrote his history some fifty years back. It cannot serve our purpose to find faults with him. We have respectfully to utilize what he has done and see ahead. It would have been far better had Indian scholarship been utilized then. But better late than never. An exhaustive treatment of the whole subject is not the scope of this pamphlet. If the necessity of a history of Sanskrit literature to be written in India, with Indian scholarship is made clear enough, our purpose is served. It is natural that the broad divisions of the subject may be pointed out here. Post-Vedic Sanskrit is not

what we seriously consider just now, It has many points in common with modern literature. Our chief aim is positively to treat the Vedic literature as one great whole, the religion of humanity. "Speech sanskritised and Veda samhitized are the greatest heritage of India in wisdom for humanity"

Vedic life has not ended, cannot end. It pervades our own life to-day throughout the world. Very keen observation is necessary to reach the Vedic and inner depths of our own times and lives, We in India are born Sanskrit. Our very terms, viz, Sanskrit, Sukta, Dharma, Varna, Jati, Guna, Brahmana and Karma and many others are definite and natural in their connotation and cannot be rendered with the same force in any other language. We shall have to write the history with the sole motive of knowledge and self-realisation and not of self-aggrandizement. The periods into which we shall divide the subject will be (1) Pre-Samhita period starting from the first cognition to the end of the Prajapati institution. It should include Nomadic life as also civic life. (2) Samhita and the formation of the Vedas into one, two, three and four and their broad Angas. Veda is all one, four is the division of the developed subject matter in accordance with its utility and use. The formative period. The expansion of the Aryan sphere of influence and the organisation of advanced political and social institutions. (3) Authenticity and position of the Brahmanas and the Upanishadas, The sacrifice or Yadna period. Histories and Puranas, shaping gradually. The Smrities or the laws of action. (4) The period of the highest Vedic development. The world dominion and world regulation and Manava Dharma Shastra. Of the knowledge of man, Shruti, Smriti, and Puranas are the most natural parts. Each is perfect in itself. They thrive all together. Each must have its history separately written. It will certainly be a complete volume by itself. Each should be independent, and thoroughly scientific, well defined, and historically accurate. (5) The post-Vedic period—the Ramayana and the Mahabharata. (6) The modern times from the advent of the Kali age as it is described.

There are certain wrong notions of western thinkers in regard to the great subjects concernig Sanskrit literature. They cannot see that the author-idea with us is the institution-idea and not the person-idea. Vyas is an institution persistently working for generations together with the same principles and exactly well-defined methods. Manu and Yadnyavalkya are institutions and not individuals. We live our Vedic life here in India. It leaves us perfectly free to act, but under proper discipline. It never binds us slave-like. Western people are yet novices in the larger life. They have much to study and to learn, Our Shruti, Smriti and Puranas pervade every inch of our life.

For the study of Sanskrit literature a sound knowledge of tradition is absolutely necessary. It is this knowledge of the right tradition that leads one to the truth safely. Blindness is a sin no doubt. It is necessary for us to shake off the inferiority complex and rise to our natural height. As the sons and daughters of India, it is our divine, bounden duty to take upon our shoulders this duty of presenting to the world the peaceful magnanimity of a perfectly balanced mind which comes as the natural fruit of the rational study and the exposition of Vedas. It does not require great argument to show that we Indians are the fittest in every way to undertake this task of writing a history of our literature. We have to write it for the right knowledge of the theory of action as also to fulfil our position and pay back our due obligation to humanity.

There is one more serious duty too. The world at the present time is fast running through a very dangerous zone of doubt, despair, misunderstanding and ignorance. The history of the so-called world-conferences going on at present is well-known. At this juncture, India can be the spiritual guide and solace of all by its knowledge of national and world behaviour under such circumstances. It is a nation of one-fifth of humanity. A nation of 400 million souls intelligent, disciplined, self-restrained straight-forward, but innocent, humble and meek with only the power of the soul and goodness to back it, is a great wonder and relief to man indeed. To understand this unique position and power from the inner soul, a faithful, scientific and original study of its literature with the history of it, is a necessity, as this is the motive force behind.

Subject-wise gems of knowledge from the Shruti, Smriti and Puranas, with authentic translations, and explanations, may also be culled, and edited for all nations for guidance towards internal and external peace, power and plenty.

Indian, Maharashtriya and Scindia philosophy permeating the life of man will certainly find the way for complete peace, quietness and spiritual happiness, it being the child of Vedic culture. May the U. N. O. realise it!

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Printed by S. P. Varde  
at his Prabha Printery,  
6, Benham Hall Lane,  
BOMBAY 4.

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*Reprinted from*

THE  
**JOURNAL**  
OF THE  
**NUMISMATIC SOCIETY OF INDIA**

VOL. XIII

JUNE 1951

PART I

*( Published in December 1951 )*

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THE  
NUMISMATIC SOCIETY OF INDIA  
THE PRINCE OF WALES MUSEUM,  
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## A RECENT FIND OF COINS FROM UJJAYINĪ.

By

T. N. RAMACHANDRAN, DEPT. OF ARCHÆOLOGY, CALCUTTA.

[Pl. V. 6-12]

Recently a very interesting hoard of coins, mostly copper, and a few lead and one or two silver and one gold nugget, was brought to my notice by Mr. V. P. Sondhi, Deputy Director, Geological Survey of India, who explained to me that they were found in the river beds of *Siprā* in the course of geological exploration. Sri M. N. Roy Chowdhury, a member of the Geological party, who was the lucky finder of the coins in the river beds, explained to me that within  $\frac{1}{2}$  a mile or so of the find-places in the river, were ancient ruins, the date of which he could not determine. Perhaps it is the site of the old city of Ujjayinī which appears to have been destroyed either by earthquake according to popular belief or by an unusual flood of the River *Siprā*. These ruins are situated 2 miles north of the present town. Here traces of old foundations are still found and antiquities such as jewels, seals, beads and copper coins have been reported as having been found from time to time during the rains. There are even now professional "gold-washers" in the locality who pick out, after washing, gold or gold coins from the bed of River *Siprā*. Evidently the coins found in the river beds were drifted from the old city area into the river by floods.

The present hoard of more than 350 coins, is of great interest to Numismatists as the coins range in date from the 3rd century B.C. to the 4th century A.D. and even later. A few Muslim coins were also found. Also were included in the hoard lead plumb-bobs, drawing-punches, anvils, balls, weights and copper ceremonial rings (*paritra*), collyrium box-lids, sheets, and weights including those of smallest denomination and tools necessary for making coins (both cast and punched). While the majority of the coins are uninscribed some are inscribed as well. The entire hoard being in heavy encrustation, it will take some months before the coins are chemically cleaned and the legends on them satisfactorily read. They are at present undergoing chemical cleaning in the laboratory of the Calcutta University under Dr. M. N. Basu, Asutosh Museum, Calcutta. As soon as they are cleaned the writer will publish a detailed article and a catalogue of them in the next number of the Journal of

Numismatic Society of India. Meanwhile to satisfy the curiosity of the readers of the Journal of Numismatic Society of India, a few important or leading coins of the hoard and a scaling are figured in the present Number (plate V, 6-12) and described below :—

No.	Description	Metal	Size	Remarks
1.	Early single type. Cast. Inscribed. Die-struck only on one side.	Copper	Quadrilateral ·75 x ·62"	Date 3rd century B.C. <b>Pl. V. 6</b>
	<i>Obv.</i> : Feet of draped figure marching left. Below legend reading 'Mā hi sa' in Brāhmī script of 3rd century B. C. "Mā" is as in Siddapur edicts of Aśoka. <i>Rev.</i> : Nothing.			
2.	Coin of Ujjayinī (cast or die-struck). Circular. Standing figure type.	Copper	Round	( <i>Cf.</i> Smith, <i>C. I. M.</i> , pl. XIX, fig. 20, p. 152, No 6. <b>Pl. V. 7</b> )
	<i>Obv.</i> : Man (King or deity ?), facing front (?), marching left, with his right hand raised and left hand grasping staff or spear; to R. 'Ujjain symbol' above and 'taurine' below. Trace of what looks like a ladder but apparently meant for railing as in "tree-in-railing" on the extreme left margin <i>Rev.</i> : "Ujjain symbol" with <i>swastika</i> in each circle.			
3.	Scaling with legend "अप्रमद" [अप्रमद = Joylessness, no pleasure ( <i>Cf.</i> Mahābhārata, XII, 10414). In the Heliodorus Garuda-pillar inscription of Besnagar the term "अप्रमद" meaning "watchfulness" occurs [नेयंति स्वयं दम चाग अप्रमद = self-control, self-denial and watch-	Copper	Rectangular ·5 x ·4"	Date 4th cen. A. D. <i>Cf.</i> Luder's list No. 669; Rapson, p. 157; A.S.I. A.R. 1908-9, p. 126; J. N. S. I. Vol. III, p.

No.	Description	Metal	Size	Remarks
	fulness]. Similar seal from C.P. with "apramāda" has been published by Prof. Mirashi in <i>J.N.S.I.</i> , vol. III, 99.			p. 99. <b>Pl. V. 8</b>
4.	Coin of Ujjayinī—Animal type—Bar left in casting. <i>Obv</i> : Tusked elephant standing left. <i>Rev</i> : Three-arched <i>chaitya</i> surmounted by crescent. or <i>Chaitya</i> and elephant type which Smith calls "Anonymous circular, cast coins, probably before 200 A. D." Description is :	Copper	Round	Smith <i>C.I.M.</i> , p. 154, No. 29; also double-die coins of <i>Taxila</i> , Smith, No. 22 on p. 158. <b>Pl. V. 9</b>
	<i>Obv</i> : Elephant left. <i>Rev</i> : Three-arched <i>chaitya</i> with crescent above.	Copper	Round	Smith <i>C.I.M.</i> pl. XXIII, fig. 3, No. 6; and Cunningham, <i>Ancient India</i> , pl. I, 25.
5.	Uninscribed cast. <i>Obv</i> : Tree in railing <i>Rev</i> : A symbol which Allan calls "hollow cross" ( <i>C.A.I.</i> , page 1xxv)	Copper	Round	<b>Pl. V. 10</b>
6.	Coin of Ujjayinī (variety <i>b</i> of class 4 of Allan, p. 257) <i>Obv</i> : Two figures (woman and man) standing facing. <i>Rev</i> : Ujjain symbol with "taurine" in each circle.	Copper	Rectangular.	Allan, <i>C.A.I.</i> p. 257 No. 103, pl. XXXVI, 3. <b>Pl. V. 11</b>
7.	Coin of Ujjayinī—class 2, variety 1 of Allan, <i>C.A.I.</i> p. 250, No. 66. <i>Obv</i> : Kārttikeya, six-headed, standing in centre holding staff ( <i>śakti</i> ) in rt. hand <i>Rev</i> : "Ujjain" symbol.	Copper	Round	Cf. Allan, <i>C.A.I.</i> p. 251, No. 66. pl. XXXVIII, 19 <b>Pl. V. 12</b>



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Printed by RAMESHWAR PATHAK,  
at The Tara Printing Works, Banaras.

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*Reprinted from*

THE  
**JOURNAL**  
OF THE  
**NUMISMATIC SOCIETY OF INDIA**

VOL. XIII

JUNE 1951

PART I

*( Published in December 1951 )*

EDITOR

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THE  
NUMISMATIC SOCIETY OF INDIA

THE PRINCE OF WALES MUSEUM,  
BOMBAY 1.

1951





# FIND OF PURI-KUSHĀN OR ORIYA-KUSHĀN COINS FROM SĪTABHĪŪJĪ. KEONJHAR DIST., ORISSA.

By

T. N. RAMACHANDRAN, DEPT. OF ARCHEOLOGY, CALCUTTA.

[ Pl. V. 1 5 ]

The recent discovery of an interesting *tempera* painting on a rock-shelter called *Rāvaṇachhāyā* in the shape of a half-open sunshade in village Sītabhīṇjī, Keonjhar District, Orissa has been of sensational importance. The subject matter of the painting is a royal procession consisting of a king on elephant preceded by footmen, a horseman, and dancing woman and followed by an attendant woman and with painted inscription below giving the name of the king as "Mahārāja Śrī Diśa Bhaṁja". The inscription is in characters of about the 4th century A.D., and this date is corroborated by an *ensemble* of evidence furnished by other associative antiquities recovered in the vicinity of Rāvaṇachhāyā such as brick remains, inscribed boulders, some with names of Śaiva ascetics, a stone carving of a *Mukhalinga* recalling Gupta models, a female figurine of soap-stone of the third-fourth century A.D., bronze ear-ornaments (*Kuy-dalas*) and lastly but not the least in importance, copper cast coins. An article on this interesting *tempera* painting by the writer with suitable colour reproductions has just been published in the *ARTIBUS ASIÆ*, No. XIV, 1/2, Switzerland. The coins alone, are described here as they also, by their nature as associative finds, indicate a similar date, *viz*, 4th century A.D.

An area  $\frac{3}{4}$  mile  $\times$   $\frac{1}{4}$  mile, bounded, on the east by a number of inscribed boulders, on the south-east by a massive rock called "Surpaṇakhā" with a *mukha-linga* in front of it, on the south by a river called Sita, the bed of which yielded some prehistoric implements. on the west by two detached semi spirodal boulders called Lava and Kuśa, on the north by a conical massive rock called "Sita-bhaṇḍārghar" and with the painted rock-shelter Rāvaṇachhāyā located almost in its centre, is not only important as recalling Sita's exile as narrated in the *Uttarakāṇḍa* of the *Rāmāyaṇa*, but also as the site that yielded a variety of antiquities including the copper cast coins under description. Five of them are figured here on pl V., four of which (pl V. 1-4) are now with the Ex-Ruler of Keonjhar and the fifth (pl. V, 5) with the writer

of this article. These coins were just surface-finds, a fact which indicates the potentiality of the site for excavation. The coins of this class are according to R. D. Banerji "Puri-Kushāṇa" or "Oriya-Kushāṇa";<sup>1</sup> according to Vincent Smith, they are probable issues of the "Rulers or Kings of Kalinga in the 4th or fifth century A.D."<sup>2</sup> and according to J. Allan, they are "Puri-Tribal Coins", probably belonging to the end of the third or early fourth century A.D.<sup>3</sup>

I am publishing here five new coins of this type found recently. Only one of these coins is with me (No. 5), the rest are with the Ex-Ruler of Keonjhar. The photographs of the four coins with the Ex-ruler were taken by a photographer who forgot to note their sizes. But I may state from memory that coin No. 1 is about .7" in diameter, as coin No. 35 of Allan's "Puri-Tribal Coins"<sup>4</sup>. The diameter of coin No. 2 is about .9" as in Allan's coin No. 40.<sup>5</sup> That of coins Nos. 3 and 4 is 1" or 1.02". Coin No. 5 is almost in its natural size, being 1.02" in diameter as in Allan's coin No. 17<sup>6</sup> and 157.82 grains in weight. The sizes are as stated above, though from the photograph their relative sizes are not obvious. But the sizes of coins 3, 4 and 5 are nearly the same. Very recently was found near Ravanachhāyā, a broken copper coin in a bad state of preservation, similar to coin No. 5, but with its diameter .9" and weight 113.73 grains. The five coins are described below :—

No. 1 ; Copper : weight not known ; size .7" (appr.)

Obv. : Rude figure of standing king as on Kushāṇa coins. Right arm slightly down, left arm raised.

Pl. V, 1

Rev. : Rude figure of standing deity as on Kushāṇa coins. resembling moon god. Cf. Smith *C.I.M.* Vol. I. Pl. XIV. 14. Not illustrated.

No. 2 ; Copper : weight not known ; size .9" (appr.)

Obv. : As on No. 1. (Not illustrated).

Rev. : Rude figure of deity, right arm extended, left arm down. Cf. Smith, *Ibid.*, p. 93.

Pl. V, 2

1. R. D. Banerji, *History of Orissa*, Vol. I, preface.

2. Smith, *C. I. M.* Vol. 1, part I, p. 65, pl. XIV, fig 14.

3. Allan, *Ancient India*, CXXI-ii, pp. 205-209, pl. XXX, 8, pl. XLIV. 14-16.

4. Allan, *Ancient India*, p. 208, No. 35.

5. Allan, *Ancient India*, p. 209, pl. XLIV-16.

6. A. I., Pl. XXZ, 8.

No. 3 ; Copper : weight not known ; size 1" (appr.)

Obv. : King riding on elephant walking to right as on the coins of Huvishka. Cf. Smith, *Ibid*, I, Pl. XIII. 3.

Pl. V. 3

Rev. : Rude standing figure, probably of the sun-god. Not illustrated.

No. 4 ; Copper : weight not known ; size 1" (appr.)

Obv. : As above.

Rev. : Rude figure probably of sun-god, r. hand extended and l. hand bent down. Cf. Smith, *Ibid*, Vol. 1, Rev. of Pl. XII. 3.

Pl. V. 4

No. 5 ; Copper weight, 157.82 grains; size 1.02"

Obv. : King standing, facing with head to left ; r. arm extended, as in sprinkling incense ; l. arm raised up, as if holding a sceptre.

Rev. Deity standing like king on the obverse. Cf. Allan, *Ancient India*, p. 207, coin 17, Pl. XXX. 5, 8.

Pl. V. 5

These coins are rough cast, untrimmed and simple. Smith and Allan say that they exhibit a reminiscence of the characteristic Kushāna-type'. The obverse is a very primitive copy of the standing Kushāna king and the reverse a copy of one of the deities on the reverse of Kushāna coins, probably the moon-god (pl. V, 1, 2, 5). The Sitabhinji specimens answer one of the main types that Allan distinguishes, one showing a fairly full figure of the king, recalling its Kushāna prototype. The Kushāna dress is clearly recognisable. Coins number 1 and 2 show on the obverse a rude standing figure with right arm down and left raised as in the Indian Museum specimens.<sup>2</sup> Coin No. 5 (Pl. V, 5) is similar to Allan's variety H, No. 17 from Puri<sup>3</sup>. The obverse shows the figure of king standing facing with head to left, his right hand out-stretched as if sprinkling (incense ?) and left hand raised as if holding. The Kushāna dress is obvious. Both arms and legs are represented by thick semi-circles. The reverse reveals similar figure standing facing left, with Kushāna dress, right-hand out-stretched as in sprinkling and left arm raised as in holding. Both feet and arm are represented by thick semi-circles. The reverse resembles a specimen from Puri

1. Smith, p. 65; Allan, *Ancient India*, CXXI

2. Smith, p. 92, No. 2

3. Allan, *Ancient India*, p. 207, 17, plate XXX, 8.

which Allan figures in plate XXX, fig. 5, while the obverse resembles another, also from Puri, figured by Allan in plate XXX, fig. 8.

The other two coins (Pl. V, 3, 4) are similar to the Indian Museum coin figured by Smith<sup>1</sup> and represent coins of the Kushāna king Huvishka with king riding elephant right on the obverse, and rude figure of a deity probably Sun-god, standing to left with right hand extended and left hand bent on the reverse. These two coins are unique finds as "Puri Kushāna" coins imitating the "King on elephant" *motif* have not been known so far.

The Sītābhiñji coins bear general resemblance to those in many other hoards known to us from Puri district, Balasore district, Rakha Hills, Bhañjakia, Mayurbhañj State, Ganjam district and Singbhum district of Chotanagpur. Sītābhiñji is in Keonjhar district which is adjacent to Mayurbhañj and Balasore districts from where big hoards of similar coins hail. Though the Sītābhiñji coins are uninscribed, the Bhañjakia and Balasore hoards include coins with the legend "Ṭanka" in characters of the 4th century A.D. Allan suggests "Teṅka" or "Lanka" as possible readings. Though it is tempting to treat "Teṅka" or "Lanka" as the name of a tribe or a king, it is very unlikely that the term would be a denomination as it is not in the genitive. According to Allan it may be a geographical name (cf. Tripurī, Kauśāmbī). The occurrence of such "Puri-Kushāna" coins also in Siāupālgarh near Bhuvaneśvar and Jaugada in the Ganjam District leads us to agree with Allan that when the supply of Kushāna copper coins, to which they were used, began to fail them, the people of Kalinga or Orissa, took to copying them, as there was enough copper in the mines of Kalinga. Allan's date, viz. 3rd or early 4th century A.D., to the various hoards of these coins examined by him,<sup>2</sup> acquires confirmatory importance by the find under description, as the coins from Sītābhiñji were found in the vicinity of a *tempura* painting of far-reaching and sensational importance, belonging on grounds of style and palaeography of an inscription on it, to the fourth century A.D. and hence like the painting also date from the 4th century A.D.

1. Smith, plate XIII, fig. 3.

2. Allan, CXXX.

## कटाह द्रोप को समुद्र-यात्रा

वासुदेवशरण अग्रवाल

भारतीय उत्कर्ष के युग में पूर्वीय द्वीपसमूह के साथ इस देश का घनिष्ठ संबंध था। भारतीय संस्कृति, धर्म और भाषा का उन द्वीपों की सभ्यता पर अत्यधिक प्रभाव पड़ा। एक प्रकार से ये द्वीपसमूह भारत की धर्म-विजय के अन्तर्गत आ गए थे। इस धर्मविजय की कथा मानवी सभ्यता के इतिहास में अतीव गौरवशालिनी है।

पूर्वीय द्वीपसमूह में निम्नलिखित द्वीपों के भारतीय नाम हैं—

यवद्वीप	जावा
सुवर्णद्वीप	सुमात्रा
मलयद्वीप	मलय प्रायद्वीप
कटाहद्वीप	केडा नामक प्रदेश जो मलयद्वीप के पश्चिम का भाग है।
वारुषक	सुमात्रा के पश्चिमी तट पर बरूम नामक स्थान
बलिद्वीप*	बाली
वारुणद्वीप	बोरनियो
नारिकेलद्वीप	पूर्वी द्वीपसमूह में से कोई एक

गुप्त संस्कृति के सुवर्ण युग में भारतवासियों ने चार समुद्रों से घिरी हुई पृथ्वी के उस पाग द्वीपान्तरो के साथ अपना संबंध स्थापित किया। महाकवि कालिदास ने रघुवंश के छठे सर्ग में कई प्रकार से देश के इस महान् भौमिक विस्तार की ओर संकेत किया है। दंडुमती के स्वयंवर में एकत्र भारतीय राज परम्परा का वर्णन करते हुए कवि ने राष्ट्रीय श्री का एक चित्र खींचा है। कहीं कवि को ऐसा प्रतीत होता है कि देश के पराक्रम ने महासागर के जलों का निक्षेप रूप

\* देखिए—मंजुश्रीमूलकल्प २।३२२—

कर्मरंगाख्यद्वीपेषु नाडिकेरसमुद्रवे ।

द्वीपे वारुषके चैव नम्रबलिसमुद्रवे ॥

यवद्वीपे वा सत्वेषु तदन्यद्वीपसमुद्रवाः ।

वाचा रकारबहुला तु वाचा अस्फुटतां गता ॥

नम्रद्वीप निकोबार है जिसका उल्लेख निकुवर नाम से राजेन्द्रदेव चोल के लेखों में है। कर्मरंग द्वीप—यह लिगर के म्थलडमरूमध्य के समीप भल्लय का ही एक भाग था। (देखिए, बागचौ, प्रिभार्न एंड प्रिड्विडियन इन इंडिया, पृ० १०३)।

से पान कर लिया है ( निरशेषपीतोऽज्झितसिन्धुराजः ) । कहीं भासित होता है कि रत्नों से भरे हुए महार्णव के मेखला-दाम से अलंकृत पृथिवी राष्ट्रीय तेज की उपासना कर रही है । कहीं कवि को प्रतीत होता है कि द्वीपान्तरों से आनेवाली हवाएं लवंगलता के पुष्पों को सुगन्धि अपने साथ ला रही हैं ( द्वीपान्तरानीतलवंगपुष्पैः ), कभी जान पड़ता है कि सागर की महोर्मियां अपनी गम्भीर ध्वनि से देशवासियों को सोते से जगा रही हैं, और कभी कवि को पैनी आँख पूर्वीय द्वीपसमूह का पर्यवेक्षण करती हुई अट्टारह द्वीपों में अपनी संस्कृति और धर्म-विजय के चिह्नरूप जो यूप हैं उन्हें प्रतिष्ठापित देखती है । धर्मविजय से उत्पन्न देश की इस यशो-महिमा को बड़े सुन्दर ढंग से कवि हमें बताता है—

आरुद्धमद्रीन् उदधीन् वित्तीणं भुजंगमानां वसति प्रविष्टम् ।

ऊर्द्ध गतं यस्य न चानुबन्धि यशः परिच्छेत्तुमियत्तयालम् ॥ ( रघु० ६।७७ )

वह यश पर्वतों पर चढ़कर उनको लाँघ गया । समुद्रों की सीमाओं को पारकर वह द्वीपान्तरों में फैल गया । पाताल भी उसके प्रमाण से अछूता न बचा । स्वर्ग तक ऊँचा उठ कर उस यश ने दिव्य आदर्शों का स्पर्श किया । वह यश कैसा था और कहां तक था, इसे कौन जान सकता है ? इतिहास के स्वर्णयुग में भारतीय संस्कृति का जो यश चारों ओर विस्तृत हुआ उसकी व्याख्या महाकवि के उदात्त शब्दों से अधिक सुन्दर और क्या हो सकती है ? इस यश की गूंज देश में और विदेश में ऊँची उठने लगी । शताब्दियां और युग उसकी प्रतिध्वनि में भर गए । शुभकाल से लेकर लगभग दसवीं-ग्यारहवीं शताब्दी तक यह उज्ज्वल यश लोक के कानों में और कंठ में बढ़ता ही गया ।

काव्य में और साहित्य में इस द्वीपान्तर संबंध के अनेक उदाहरण मिलते हैं । मध्य द्वीप के एक अवान्तर भाग कर्मगंग प्रदेश में आनेवाले चमड़े से बनी हुई ढालों का उल्लेख बाणभट्ट ने हर्षचरित में किया है ( निर्णयसागर सं० पृ० २०७, २७० ) । 'तिलक मंजरी' के धनपाल ने मधुर कल्पना करते हुए लिखा है कि राजा मेघवाहन की मदिरावती नाम की रानी ने जब गर्भ धारण किया तो उसके हृदय में यह दोहड़ अभिलाषा उत्पन्न हुई कि द्वीपान्तरों में जो देवायतन हैं उनमें होनेवाले सांध्य नृत्य को चलकर देखा जाय । इसी प्रकार सम्राट् के प्रासाद के प्रेक्षागार में जो अभिनय होते थे उन्हें देखने के लिये अष्टादश द्वीपों के भूपतियों को निमंत्रण जाता था । ये कथा लेखक की कल्पनाएँ हैं, परन्तु इनके पीछे जो लोकभावना थी उसको भारत और समुद्रपार के देशों के बीच घनिष्ठ सम्बन्ध से बल मिलता था । इस दृष्टि से भारतीय कथा-साहित्य को छानबीन होनी चाहिए । तारों भरी रात में जब नाविक अपने पोतों पर सागर की यात्रा करते थे तब उनका समय कथा-कहानियों के द्वारा बीतता था । सब प्रकार का कहानी

साहित्य उस काल में ( पाँचवींशती से आठवीं-नवीं शती तक ) दिनरूता रात चौगुना बड़ा समुद्रपार की यात्राओं के वृत्तान्त भी कहानी बनकर उस लोकसाहित्य में भुल मिल गए। उसीमें पूर्वी द्वीपपुंज के कुछ नामों ने भी साहित्य में घर कर लिया। 'एक राजा था' की तरह कहानियों का आरम्भ इन्हीं नामों से होता था। इनमें सुवर्णद्वीप और कटाह द्वीप के नाम विख्यात हैं। सुवर्ण द्वीप सुमात्रा में था जहाँ श्रीविजय के प्रतापी शैलेन्द्र सम्राटों का साम्राज्य कई शताब्दियों तक फूला-फला वहाँ के शैलेन्द्रराज श्री बालपुत्र देव ने नालंदा के अन्तरराष्ट्रीय विद्यापीठ के लिये, जिसे चातुर्दश आर्य मिश्रसंघ कहते थे, पाँच गांव दान में दिए थे, जिन की आप से धर्मग्रन्थों का लेखन, विहार की टूट-फूट को मरम्मत ( खंडस्फुटितसमाधानार्थम् ), मिश्रुओं के लिये वस्त्र, भोजन, ओषधि आदि और बुद्ध भगवान् की पूजा के लिये फुटकर मामूरी का प्रबन्ध होता था। नवीं शताब्दी का यह ताम्रपट्ट नालंदा की खुदाई में सुरक्षित मिल गया है। कथासरित्सागर के जलकारवती लिम्बक की एक कहानी में समुद्र और नामक महाबाणक का जहाज़ में माल आदकर सुवर्णद्वीप की यात्रा करने का बड़ा रोचक वृत्तान्त है जिसमें समुद्रयात्रा और नौविद्या के अनेक पारिभाषिक शब्द पाए जाते हैं। इसीमें सुवर्णद्वीप या सुमात्रा के कलदापुर नामक नगर का भी उल्लेख है। ग्यारहवीं शताब्दी के आरम्भ में सुवर्णद्वीप के आचार्य धर्मेकीर्ति समस्त एशिया के महा प्रसिद्ध विद्वान् थे। दोपहर श्रीजान ( अतिश ) नामक महापंडित भी दस वर्ष तक ( १०११-२३ ) सुवर्ण द्वीप में रहकर उनके पास पढ़ते रहे।

## २.

इसी प्रकार की यात्राओं में कटाह द्वीप का नाम भी आता है। यह कटाह द्वीप मलय प्रायद्वीप का उत्तर-पश्चिम का भाग था जिसे आजकल केडा कहते हैं। चोल-वंशी राजाओं के लेखों में इसकी संज्ञा 'कडार' है। राजेन्द्र चोलदेव प्रथम ने ( १०२५ ई० ) अपने मामुद्रिक दिग्विजय के वर्णन में नक्कोर ( निकोबार ), तक्कोल ( जट्ट के स्थलडमरूमध्य के कुछ दक्षिण तक्कोल स्थान ), इलंगाशोक ( मलय द्वीप में लंकाशुक स्थान ) आदि के अतिरिक्त कडार द्वीप की विजय का भी वर्णन किया है। कडार के शासक संग्राम विजयोत्तुंगवर्मन् को अनेक हाथियों से भरी हुई सेना के साथ पकड़ लिया और उनकी प्रभूत खगशि को छीनकर नगर के विद्याधर तोरण नामक ऊँचे फाटक को भी ले लिया। राजेन्द्र चोल के पिता श्रीराजराज चोल के संस्कृत शिलालेख में कडार का संस्कृत नाम कटाह ही दिया गया है और उसमें श्रीमार विजयो



तृतीय वर्मा की शैलेन्द्र वंश में उत्पन्न, श्रीविजय का अधिपति कहा गया है जिन्होंने अपना आधिपत्य कटाह द्वीप के ऊपर भी स्थापित कर लिया था। राजराज चोल का बड़ा ताम्रपट्ट इस समय लाइब्ररी में सुरक्षित है ( देखिए, एपि० इंडिका, भाग २२, पृ० २४१-२, २५७ । ) इस प्रकार कटाह द्वीप नाम की प्रसिद्धि ११वीं शताब्दी तक निरन्तर पाई जाती है।

अब हम उन कहानियों का उल्लेख करते हैं जिन में कटाह द्वीप की समुद्र-यात्राओं का वर्णन है। कथासरित्सागर में सोमदेव ने लम्बक १० की तरंग ५ में एक अगुरुवादी मूर्ख सेठ की कहानी इस प्रकार दी है।—

किसी धनी सेठ का एक मूर्ख लड़का था। वह एकबार वाणिज्य के लिये कटाह द्वीप को गया। उसने अपने सामान में बहुत सा अगुरु भी बेचने के लिये लादा। उमका और माल ( भर मांड ) तो बिक गया पर अगुरु का कोई ग्राहक न मिला। वहाँ वाले अगुरु को जानते न थे। तब उस वाणिक पुत्र ने क्या देखा कि लोग आते हैं और लकड़हारों से कोयला खरीदकर ले जाते हैं। उसने भी अपने काले अगुरु की लकड़ी को जलाकर कोयले बना डाले और उन्हें बेचकर गूल्या लेकर घर वापिस आया। जब वह अपनी धृष्टमत्ता की डींग मारने लगा, तो लोग उसकी मूर्खता पर हँसने लगे।

क्षेमैन्द्र-कृत बृहत्कथामंजरी के २५ लम्बक की देवस्मिता की कहानी में जो कटाह द्वीप ( सू० १८३ ) है वह कटाहद्वीप का ही रूपान्तर ज्ञात होता है। धनगुप्त नामक गन् विक्रेयी वाणिक ने बर्बर देश में किसी धनिक की पुत्री देवस्मिता को प्राप्त किया था। ताम्रलिप्ता लौटकर उसके पुत्र प्रहमेन में उसका विवाह हुआ। कालान्तर में प्रहमेन भी कटाहद्वीप में व्यापार करने गया। चलते समय शिव और पार्वती में उसने दो ऐसे कमल फूल प्राप्त किए जो सदाचार का उल्लंघन करने पर पर मूर्च्छा जाते। एक अपने साथ और दूसरा देवस्मिता के पास रख कर वह विदेश गया था। वहाँ चार वाणिक पुत्रों के मामले उसने बात खोल दी। वे चारों देवस्मिता की परीक्षा के लिये ताम्रलिप्ता आए। देवस्मिता गरी उतरी। इस भय में कि कहीं ये मेरे पति को हानि न पहुंचावे वह स्वयं भी कटाह द्वीप पहुंची और वहाँ राजसभा में सब रहस्य प्रकट करके अपने पति को प्राप्त किया।

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कटाह द्वीप की समुद्रयात्रा की दो अन्य कहानियाँ जैन कथा-साहित्य में सुरक्षित हैं। हरिभद्रसूरी ( आठवीं शताब्दी )-कृत समराइच्चकहा ( समरादित्यकथा ) नामक एक बहुत बड़ा कहानी ग्रन्थ प्राकृत भाषा में है। उसमें एक कहानी इस प्रकार है :

भारतवर्ष में ताम्रलिप्ता पुरी में रहनेवाले कुमारदेव सेठ के घर में एक पुत्र उत्पन्न हुआ

उसका नाम अरुणदेव था। उसी समय पाटलापथ नगर में यशादित्य सेठ के घर में एक कन्या उत्पन्न हुई। उसका नाम देवनी था। जब वह बड़ी हुई तब उसका विवाह अरुणदेव के साथ कर दिया गया। विवाह के अनन्तर अरुणदेव व्यवहार के निमित्त यानपात्र (जहाज़) लादकर महा कटाहद्वीप को गया। मार्ग में कर्म की विचित्र गति से उसका जहाज़ डूब गया। तब वह समुद्र में कूदा और एक बहते हुए फलक के सहारे समुद्र के पार होकर किनारे पर आ लगा। कहानी के बहुत उतार-चढ़ाव के बाद वह पाटलिपुत्र में जा पहुँचा इत्यादि (गमारादित्यकहा पृ० ५८५)। इसमें कटाहद्वीप से संबद्ध अंश इतना ही है।

इसी ग्रन्थ की दूसरी कहानी संक्षिप्त रूपमें यह है—

जम्बूद्वीप के भारत नामक वर्ष में एक 'सुमम्भ' नगर था। उसमें वैश्रवण नाम का एक सार्थवाह रहता था जो सब स्थानों का प्रधान नगरसेठ था और दीन अनाथ कृपण जनों पर कृपा करनेवाला था। उसकी श्रीदेवी नाम की स्त्री के धन नामक पुत्र हुआ उसका विवाह धनश्री नामक स्त्री से हुआ। उसी नगर में समृद्धिदत्त नामक दूसरा सार्थवाह-पुत्र था जिसने देशान्तर के व्यापार से बहुत सा धन कमाया उसे वह दीन अनाथ दुःखियों को बाँटा करता था। उसके विराग को देखकर धन का मन उदास हुआ उसके सेवक नन्दक ने इसका कारण पूछा तो उसने गब ढाल कहा। नन्दक ने कहा।—तुम्हारे पास भी तो पुण्य से प्राप्त हुआ बहुत धन है, तुम तो इससे भी विशेष प्रभावशाली हो। इस पर धन ने कहा—पुरखों के कमाए हुए धन से क्या ? कहा है कि लोक में उसीकी सच्ची बड़ाई है जो अपनी भुजाओं से पैदा किए हुए धन को दीन अनार्थों में बाँटता है। मैंने अपने आप तो कुछ कमाया ही नहीं। तू पिता से पूछ जिससे मैं दिसावर को जाऊँ और पुरखाओं के कर्म व्यापार से धन उत्पन्न करूँ। नन्दक ने बड़े सेठ जी से आज्ञा ले ली। धन बहुत खुश हुआ और तैयारी करके घोषणा करा दी—“धन नाम का सार्थवाह का पुत्र यहाँ से ताम्रलिप्ती नगरी को जायगा। जो उसके साथ चलना चाहे चले। जिसे जो पायेय या मामान चाहिए वह उसे मिलेगा।”

इस प्रकार जब वे चलने को तैयार हुए तब उसकी स्त्री धनश्री भी साथ चलने का आग्रह करने लगी। धन ने उसको भी ले लिया। उसी समय उसकी माता भी आई और पुत्र को समझाने लगी—हे पुत्र परदेस बड़ा कठिन होता है। वहाँ वियोग तो मानी हुई बात है। मिलन कठिनाई से ही होता है। धनोपार्जन में भी कम क्लेश नहीं उठाना पड़ता। मन में विषाद का न होना ही धन कमाने का मूल है। यद्यपि तुम में सब गुण हैं फिर भी परदेसमें क्षमा आदि गुणों का विशेष विचार रखना और बराबर अपना कुशल समाचार (प्रवृत्ति) देते रहना।—धन ने माँ की बात सिरमाथे की और यात्रा के लिये निकला।

दो महीने बाद वह ताम्रलिप्ती पहुँचा। वहाँ के राजा से मिला जिसने उनका सम्मान किया। तब उसने अपना माल बेचा पर जैसा चाहता था वैसा लाभ न हुआ। वह सोचने लगा कि बिना जोखिम उठाए लक्ष्मी से मेरी भेंट नहीं होती मैं निश्चय समुद्र पार करूँगा। इस विचार को उसने अपने सेवक और स्त्री से कहा। उन्होंने उसकी रुचि का समर्थन किया। तब धन ने परदेस को जानेवाला माल ( परतीरगामी भांड ) खरीदा और जहाज तैयार करने लगा।

इस बीच धनश्री ने ( जो मनमें पति को ओर से मेल रखती थी ) सेवक से कहा। चलो दूसरी जगह चलें। तुम्हें समुद्र पार जाने से क्या ? नन्दक स्वामिभक्त था। उसने पीछे रहना स्वीकार न किया। इसी बीच में जहाज ठीक हो गया, और माल उसपर लाद दिया गया। शुभदिन विचार कर धन भी वेलातट पर आया। पहले दोन और अनार्यों को उसने धन बांटा, फिर जलनिधि की पूजा की और जहाज ( यानपात्र ) का भी पूजन करके परिजन के साथ उसपर नहा। लंगर उठा लिए गए ( उच्छिखत्ता नंगरा, समग ० पृ० २०२ ) और पाल खोलकर उन्हें दवा से भर दिया गया। कछुवे और करिमकरीं से भरे हुए सागर में जहाज चलने लगा। शंखों से भरा हुआ समुद्र पाताल की तरह गहरा था। लहरों के ऊपर उछलने हुए जल-दस्ती जैसे जान पड़ने थे मानो सागर में घुमड़ते हुए मेघरूपी दायियों के प्रतिस्पर्धी गर्जेंद्र हों। कहीं वेलातट की लवली लताओं पर बैठे हुए गंधर्व-मिश्रुनों की ओना दिमाई पड़ती थी। कहीं त्रल, तीरे, नीलम और मरकत के रंगों से रंगा हुआ जान पड़ता था। कहीं दवा पानी के छींटों को उड़ानी हुई किनारे के ताल-वनों में मगसर बह रही थी और कहीं विद्रुम-लताओं से समुद्र सुहावना लग रहा था।

इस प्रकार कई दिन बीतने पर धनश्री ने अपने पति को पहले तैयार किया हुआ विषाक्त भोजन खिला दिया। धन के शरीर में महाव्याधि फूट निकली। उसका पेट फूल आया, भुजाएँ सूख गईं। मुँह फूल गया, जाँघों में गांठें पड़ गईं और दाढ़-पैर फूट निकले। खाना-पीना कुछ अच्छा न लगता था। धन दुःखी होकर सोचने लगा : माता ने चलते समय कहा था कि मन में विषाद न आने देना। अब दूसरा किनारा भी पास आ गया है। मैं इस नन्दक को अपने माल का स्वामी बना देता हूँ, न जाने कल क्या हो जाय ? यह सोचकर उसने नन्दक से कहा—“तुम इस रिकथ के अधिप्राता बनो, तुम ही अब नायक हो। तट आने पर जैसा उचित हो उपाय करना। यदि मेरा गोग दूर हो जाय तो सुंदर है, अन्यथा धनश्री को बंधु-बंधवों के पास पहुँचा देना।” यह सुनकर नन्दक बहुत दुःखी हुआ। किंतु धन के सम्मान से उसकी आज्ञा मानने के लिये तैयार हो गया।

इतने में महा कटाह नाम के द्वीप में सब पहुँच गए। नन्दक भेंट का सामान लेकर

वहां के राजा के दर्शन को गया। राजा ने भी उसका सम्मान किया और ठहरने का स्थान दिया। उसने अपना सामान उतरा और वंदों को बुलाकर चिकित्सा प्रारंभ कराई। किंतु लाभ न हुआ। तब उसने अपना भांड बेच डाला, और बदले में वहां से मिलनेवाला प्रतिभांड ले लिया। वह राजा से भेंट करने गया और उससे सम्मानित होकर अपने देश के लिये रवाना हुआ।

कई पड़ाव बीतने पर धनन्धी ने सोचा कि मेरा पति बच गया, अब क्या करूं? एक पहर रात शेष रहने पर निवृत्त होने के लिये बंटे हुए सार्धवाह पुत्र को उसने पाताल के समान गंभीर समुद्र में धक्का दे दिया, और “हा आर्यपुत्र!” कहकर रोने लगी। नंदक को जब हाल मालूम हुआ तो उसने दुःखी होकर बोहित को रुकवाया और अच्छी तरह ढूंढ़ने के बाद फिर लंगर उठा लिए गए और जहाज स्वदेशाभिमुख चल पड़ा।

धर जैसे ही सेठ समुद्र में गिरा उसके हाथ पहले भग्न हुए, बोहित का एक फलक लग गया और उसकी सहायता से वह समुद्रमें तैरने लगा। नमकीन पानी के सेवन से उसका गेग भी चला गया और वह किनारे आ लगा। समुद्र के इस पार जाकर उसने पुनर्जन्म समझा।

इस प्रकार कटाह-द्वीप के सामुद्रिक-व्यापार से संबंध रखने वाली इस कहानी के द्वारा हमें तत्कालीन समुद्र-यात्राओं का एक ज्वलंत चित्र प्राप्त होता है। कहानी-कार ने लोक की दृढ़ धारणा की चर्चा की है कि बिना समुद्र पार किए संपत्ति प्राप्त नहीं होती। सामुद्रिक-व्यापार यद्यपि उस समय जोखिम का काम था, फिर भी अदम्य उत्साह और साहस से भरे हुए श्रेष्ठो इस प्रकार के वाणिज्य में सफलता प्राप्त करना अपने जीवन का ध्येय समझते थे।

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उत्तर के साहित्यिक नगणों में प्राचीन सामुद्रिक व्यापार के संबंधमें हमें कुछ पारभाषिक शब्द भी प्राप्त होते हैं। जहाज के लिये चार शब्दों का प्रयोग हुआ है, नौ, यानपात्र, प्रवहण और बोहित। जलनिधि, रत्नाकर, समुद्र सिन्धुपति आदिक सागर की संज्ञाएं प्रसिद्ध ही हैं। भगवान कहकर भावपूर्वक समुद्र की पूजा की जाती थी। समुद्र पार करने के लिये ‘समुद्र-तरण’ और लंघन शब्द आये हैं। व्यापार के लिये ‘वाणिज्या’ और ‘व्यवहार’ शब्दों का प्रयोग हुआ है। माल के लिये ‘भाण्ड’ शब्द है। जो माल स्वदेश से बाहर को जाता था उसके लिये ‘परतीरगामी’ इस सुंदर विशेषण का प्रयोग हुआ है। जहाज की बंदरगाह में प्रतीक्षा करने के लिये ‘प्रवहण-गवेषणा’ शब्द है। जहाज की तैयारी के लिये प्रवहण-संजोना यह महावग प्रयुक्त होता था। जहाज पर सवार होने से पूर्व कुछ दान-दक्षिणा और पूजा-पाठ करने की प्रथा थी। समुद्र और यान-पात्र दोनों की विधि से पूजा कराई जाती थी। लंगर के लिये ‘नंगर’ शब्द का

प्रयोग हुआ है। समरादित्यकथा से ज्ञात होता है कि ७५० ई० के लगभग यह शब्द हमारी भाषा में आ चुका था। लंगर उठाने के लिये 'उक्खित्ता नंगरा' और 'उच्चाइया नंगरा' महावरों का प्रयोग हुआ है, अर्थात् लंगर का उत्क्षेप (ऊपर फेंकना) और नंगर का स्वस्थान छुड़ाना। 'उच्चाइया' संस्कृत 'उत्थाजिता' का प्राकृत रूप है। हिंदी की उचाना (=उठाना) धातु इसीसे निकली जान पड़ती है। अपना माल बेचकर व्यापारी विदेश से जो माल लाते थे उसके लिये 'प्रतिभांड' शब्द था। माल लादकर जहाज़ को ठीक करना इसके लिये 'सज्जित' शब्द का प्रयोग हुआ है। अपने देश या भारतवर्ष के लिये वैदेशिक व्यापारी 'निजदेश' या 'खदेश' का प्रयोग करते थे। परदेश में पहुंचते ही पहले उपहार लेकर व्यापारी वहां के राजा से भेंट करते थे। व्यापारियों के ठहरने के लिये विशेष आवास-स्थान होते थे। यात्राओं में जहाज़ों के टूटने और डूबने की घटनाएं भी हो जाती थीं। ऐसे यानपात्र को भिन्न और विपन्न कहा गया है। ऐसे समय यात्री अपनी रक्षा के लिये समुद्र में कूद पड़ते थे। कभी कभी लकड़ी के फलक और तैरते हुए जहाज़ के टुकड़ों के हाथ लग जाने से उनकी प्राण-रक्षा हो जाती थी। कहानियों में इस उपाय का बहुधा प्रयोग किया गया है। जहाज़ को गति के लिये 'यानपात्र का चपलभाव' महावरा आया है और जहाज़ रुकवाने के लिये 'धराविया' प्रयोग हुआ है। गुप्तोत्तर काल से लेकर मध्यकाल तक पूर्वी द्वीप समूह की यात्रा के लिये ताम्रलिप्ती का बंदरगाह प्रसिद्ध था, जिसकी पहचान मेदिनीपुर जिले के तामलुक नामक गांव से की जाती है।

आर्यशूर कृत जातकमाला के अंतर्गत सुपारगजातक में भा एक बहुत साहसपूर्ण समुद्र-यात्रा का वर्णन है, जिसमें जहाज़ डूबते-डूबते बच गया था। वहां व्यापारियों के लिये गौयात्रिक शब्द आया है, और जहाज़ों को चलाने वाली प्रश्रिमी हवाओं का 'पाथात्यवायु' नाम से उल्लेख हुआ है। संभवतः यही वे मौसमी हवाएं थीं जिनका परिज्ञान प्रथम शताब्दी ई० के लगभग व्यापारियों को हुआ था। अनुकूल वायु और अतिकूल वायु भी पारिभाषिक शब्द थे। कपड़े के पाल के लिये 'मितपट' शब्द का प्रयोग हुआ है। आत्मरक्षा के लिये परिकर बांधकर समुद्र में कूदना और गिरने के बाद बाहुविक्षेप या वाग्द्विगम्य करने का भी वर्णन आया है। वारि-व्यायाम शब्द अपनी भाषा में इस अर्थ के लिये महाजनक जातक के मणि-मेखला संवाद में भी प्रयुक्त हुआ है।

भारतीय नौ प्रचार विद्या, कर्णधार कर्म और नाविक तन्त्र से संबंध रखनेवाले सैकड़ों शब्दों का प्रयोग धनपाल कृत 'तिलकमंजरी' (ग्यारहवीं शताब्दी) में आया है। जिसका विस्तृत वर्णन किसी अन्य लेख में किया जायगा।

## ‘Asoka’

*Asoka* (Gaekwad Lectures). By PROF. RADHAKUMUD MOOKERJI.  
8 $\frac{3}{4}$  × 5 $\frac{3}{4}$ , xii + 273 pp. Macmillan, London. Price, 21s. net.

Professor Mookerji is at his usual best in this erudite work of his, which bears on every page ample evidence of his having read, marked and inwardly digested everything of value that has been published on the subject ever since 1837, the memorable year which witnessed the first successful reading and tentative translation of an Asokan inscription after long years of bewilderment, blunder and bungling from about 1750, when an Asokan inscription, perhaps for the first time, attracted the attention of a European. The author modestly calls his work a ‘compilation.’ But it is much more than that, being the best and most up-to-date, comprehensive treatise on Asoka, presenting several original features. For one thing, he has practically stabilized Asokan chronology, both epigraphic (p. 37) and legendary (pp. 44–46), taking 257 B.C. as the year of Asoka’s reference to his Hellenistic royal contemporaries in Rock Edict XIII, assigned by the author to the same date, which, if not exact, cannot be more than a year out. Again, his fresh interpretation (pp. 23, 24, 109, 110 and footnotes, and p. 117, note 6) of the phrase *samgha upayite*, of Minor Rock Edict I, line 3 (p. 215), places the early events of Asoka’s religious career in a new setting. Line 8 of the same edict (p. 216), one of the notorious cruxes of Asokan inscriptions, is explained by the author with considerable insight in a lengthy footnote (pp. 113–16). Against Mr. Harit Krishna Deb, Dr. D. R. Bhandarkar and others, Prof. Mookerji maintains (pp. 41, 42, 211, 212) that, far from being prior to the Rock Edicts, Pillar Edict VII is the very last of Asoka’s edicts. Kautalya’s *Arthashastra* is frequently laid under contribution for elucidating the points of contact between that ancient work and the Asokan edicts, and a judicious use is made in the book of the northern and southern cycles of legends about the emperor. A special feature of the book is that it is well illustrated by a number of clear photographs of about a dozen Asokan monuments, as well as an excellent plate showing the Asokan alphabet, which will doubtless be of great use to those who wish to study the facsimiles of Asokan and other inscriptions in Brahmi characters.

As the Rev. James M. Macphail has said in a different connection (in his *Asoka*, p. 83), ‘the impression we have of the great Buddhist emperor is of a figure not unlike one of his own pillars.’ A portrait of Asoka was therefore a desideratum, and Dr. Mookerji could, in default of a contemporary statue, have reproduced on a full

and of Tosali, as well as of the *aryaputra* of Suvarnagiri. These princes were viceroys (p. 124, note 8). Similarly, Keralaputra was the Viceroy of Kerala, and Satyaputra, Viceroy of the Satya province. In support of this interpretation of Keralaputra, there is the tradition that the first kings of Kerala were brought from the Chola or Pandya kingdom and allowed to rule for a dozen years each. It may be because Satya and Kerala territories were merely Pandya and Chola provinces, and not independent kingdoms, that in Rock Edict XIII Chola and Pandya alone are mentioned (166) as the southern kingdoms, while Rock Edict II gives Chola, Pandya and also Satyaputra and Keralaputra. Satyabhumi, of Malabar tradition, may be the southern extremity, which, we suggest, can be identified with Satyaputra's province. For there is the Suchindram Temple there, long famous throughout Kerala for *satya*, i.e. the oath and trial by the ghee ordeal at that temple.

Among the plates in Prof. Mookerji's book are a photograph of the Lumbini pillar in the Nepal Tarai and a facsimile of Asoka's inscription on it, which specified, 'Here was born the Buddha Sakyamuni.' Recently, since the author published this book, there was discovered near Bhuvanewar, in Orissa, a stone slab bearing a copy of the above Asokan inscription (see *Statesman*, Calcutta, 8th July, 1928). The Superintendent of the Archaeological Section of the Indian Museum, Calcutta, who examined a photograph of the Bhuvanewar inscription, says that it does not seem to be 'a genuine Mauryan copy of the Rumindei pillar-inscription, but a very carelessly executed modern copy' (*The Western Star*, Trivandrum, August 27, 1928).

T. K. JOSEPH.

# Āntu and Etir-Āntu

OR

YEAR AND AFTER-YEAR

BY

T. K. JOSEPH,

*Trivandrum*

In the inscriptions of South Indian kings the years of their reign are found expressed variously in the following terms :—

1. cēllā-niṇṭa āntu ( செல்லா நின்ற ஆண்டு ) = the current year, or the year *now* running—as in “ the current year five of King Sthāṇu Ravi ” ( of the Quilon Church copper-plate of ca. 880 A.D.).

Here the regnal years are reckoned (*without a break*) from the very beginning of the first regnal year, as in much more ancient documents outside India, e.g. in Persia, Babylon, Palestine, &c.

2. āṇṭaikku etir (cellāniṇṭa) āntu ( செல்லா நின்ற ஆண்டைக்கு எதிர் ஆறாம் ஆண்டு ) = the (current 6th, 7th, 8th, 10th or 29th) year *after* the (first) year (of Rajaraja III). See Mr. S. Subrahmanya Sastri's paragraph quoted in Mr. K. N. Daniel's article in this *Journal* for Dec. 1948, pp. 278-9.

In this case the total number of years, say 7, is split into “ year ” and (6th) “ *after-year* ”, and not given straight away as the current 7th year as in (1) above.

*Etir* ( எதிர் ) here has the usual sense of future, or after as in etir-kālam ( எதிர்காலம் ), future time or after-time, as opposed to cenṭa kālam ( சென்ற காலம் ), past time, and nikal kālam or cellā-niṇṭa kālam ( நிகழ்காலம், செல்லா நின்றகாலம் ), *present*. Although the qualifying word ‘ current ’ precedes ‘ the first year ’, the epithet strictly pertains to ‘ the 6th year ’ *after* the first, i.e. to the 7th year of the king's reign. “ 6th year *after the year* ” is usually interpreted as the 6th year after the *whole* of the first year. But see the last para of this note. (*Etir* has usually been given the sense of opposite to.)

3. iraṇṭām āṇṭaikku etir nālām āntu ( இரண்டாம் ஆண்டைக்கு எதிர் நாலாம் ஆண்டு ) = the current 4th year *after* the 2nd year, i.e., 2nd + 4th = 6th year. See the many instances given on pp. 275-6 of Mr. Daniel's article referred to above.



Here as in the previous case the total number of regnal years is split into two only. This second kind of splitting is far more numerous than the other ( $1 + 6$ ,  $1 + 7$ , &c.). The "2nd year" is usually regarded as indicating that 2 *whole* years elapsed since the beginning of the reign.

4 (a) 2-ம் ஆண்டைக்கு எதிர் 6-ம் ஆண்டைக்கு எதிர் 35-ம் ஆண்டு = the current 35th year after the 6th year after the 2nd year (from the very beginning of the reign of Bhaskara Ravi. *Ibid.*, p. 275).

This means the  $2 + 6 + 35$ th = the 43rd regnal year. Here 2nd and 6th indicate 2 whole years immediately preceding 6 whole years, with *no break* at all in the reign of 43 years.

4 (b) 2-ாவதின் எதிர் 22-ாவது வைகாசி துடங்கி 31-ாவதின் எதிர் 9-வது வரை 17-வாஷம்  
= (nearly) 17 years from the tenth month of 2 + 22nd year (= 24th year) up to 2 + 31 + 9th (= 42nd) year (of King Arikesari mentioned in the Tenkasi pillar inscription).

Here 24 is split into 2 & 22, while 42 is split into 2, 31 and 9—i.e. 9th year *after* the 31st *after* the 2nd, this "after the 2nd" being understood from the first part of the sentence. The interval will then be ( $42 - 24 =$ ) a little more than 17, say  $17\frac{1}{2}$  years; and not  $16\frac{1}{4}$  as it will be if 2 is not added. ( $31 + 9$ )  $- 24 = 16$  years and 3 months only, even if the later limit is the very end of the 40th year. See this *Journal* for Dec. 1948, p. 277, No. 5.

5. 13-ாவதின் எதிர் 12-ம் ஆண்டு = the 12th year *after* the 13th year (of Kulasekhara Deva), i.e. the 25th year, with *no break* at all.

In this case there is neither 1 nor 2 in the splitting. See *ibid.*, No. 6 (p. 277).

From the numerous instances given by Mr. Sastri and Mr. Daniel it is evident that, *except* in the case of the regnal years expressed as  $1 + x$  or  $2 + x$ , there is no partiality towards any particular number. It is also clear that *no breaks* are discernible in any king's reign, and that since the inscriptions are in prose the splitting of a number is not for the sake of any *metre*.

Every year of a king's reign (either as a minor during the regency, or as viceroy, or as sole ruler) must have had some important event or events, and they must have been recorded as usual in the 'grantha-varis' or court chronicles as having taken place—

a. in the king's 1st, 2nd, 3rd - - - 21st, 22nd year, &c. Or, if there were only a few memorable events, they would be

recorded in the chronicles and the memory of the king's subjects as having occurred, for instance,

b. in the king's 5th year, 7th year *after* the 5th, 3rd year *after* that 7th (i.e. after the 7th after the 5th).

See actual instances in 4 above mentioning  $2 + 6 + 35$ ,  $2 + 22$ ,  $2 + 31 + 9$ , and in 5 above, recording  $13 + 12$ . There are such instances in documents other than inscriptions. In the above 2nd, 8th, 43rd ; 2nd, 24th, 33rd, 42nd ; 13th and 25th regnal years of the three kings respectively, important, memorable events occurred, perhaps even a dethronement for a few months or years ; and there is nothing unusual in saying or recording that such an event occurred  $y$  years after another weliknown event, which had taken place  $x$  years after another well-remembered one.

We should bear in mind too that the court chroniclers, astrologers, notaries, historians, authors of Puranas, and the generality of the kings' subjects were not living in an uncharted ocean of time, but had the Kali, Saka and Quilon eras, the 60-year cycle, etc. (with the year beginning with Mesha, Simha, or Kanya). To avoid mistakes in reckoning the regnal years they could check them with the years of the above eras, or of the cycle of 60 years.

Now the only peculiarity in the splitting of the regnal years is the very frequent occurrence of 2, and the less frequent occurrence of 1. The usual explanation for this is that the coronation, or full-fledged sovereignty of the kings occurred in the 2nd or the 1st year of their reigns. There is nothing impossible in that view.

But an *alternative* explanation may be offered here. It is seldom that a reign begins on the 1st day of the first month of a Mēshādi Kāli year, or a Simhādi or Kanyādi Quilon year.<sup>1</sup> Suppose it began on an auspicious day, say the 3rd day of the 7th month (of a cyclic or calendar year, e.g., the 125th Quilon year). Then the first regnal year will extend from 3-7-125 Q.E. to 2-7-126 Q.E. To make it tally with the already employed and quite familiar solar year, the first part of the regnal year forming the last part of the

1. In the southern parts under the influence of the Quilon king and his astronomers the Quilon year began with the month of *Simha* (Chingam), while those in some other parts of Malabar began the year with the month of *Kanya* (Kanni), probably because, according to the *Brāhmana* dictum "*citrā nakshatram bhavati mukham va ētat samratsarasya*" = the *citrā* (Spica) asterism (which we know is just opposite *aśvati*, the present first asterism of the Kali year) is the *mukham* (= face, beginning) of the year, and *citrā* is in *Kanyā* (Virgo) *rāsi*.

The Quilon astronomers preferred *Simha* (Leo) as the first month probably because it was, and is, regarded as the Sun's *swakshētra*, or own house,

Quilon year 125, was probably reckoned as regnal year 1, and 126 Q. E. as r. y. 2. The reckoning would be as follows :—

R. y. 1. = 125 Q. E., last part only ; hence not one, strictly.

R. y. 2 = 126 Q. E.

R. y. 3 = 127 Q. E., reckoned as 3rd year, or as 1st year after the 2nd, or as 2nd year after the 1st although the 1st is not one full year.

R. y. 15 = 139 Q. E., reckoned as 13th year after the 2nd, or otherwise, optionally. If any dethronement happened at at all there is no evidence of its having been regarded as a break in continuity.

as *Sun-day* was already the *first* day of the week, and Vishnu's *Sravana* (Onam), a very important festival day in Malabar, falls in that Simha month very often.

Again, the wonderful display of the meteoric shower of Leonids periodically from the radiant point in Leo (Simha) may have given Simha's month (Chingam) the first place.

Now, in the 9th cent. there were Jews in Quilon, for whom Abib, or Ab (nearly April = Mēsha, Mēdam) was the first month as for the Hindus. For at the building of the famous Jerusalem temple by Solomon (1015-980 B.C.), who was perhaps aware of the Hindus' first month, "Abib, which was formerly the seventh month, now became the first month" (at Solomon's instance).—(Martin Davidson's *The Stars and the Mind*, Watts & Co., London, 1948, p. 73.

There were then Arabs too in Quilon, for whom Muharam was the first month ; and Syrians also, for whom Kōnūn Hrōi (Hindu Makara) was the first month. For these Syrians Āb of the Jews corresponded to the Hindu month of Simha (Chingam of Quilon), under the name Āb itself.

The first year of the Quilon Era appears to have been chosen as such (Saptarsi ?) because in that year the Persian Sabr-Iso re-founded the city (as the Quilon copper-plate says), and a new temple (perhaps of Vishnu) was dedicated (perhaps on Onam day) in that new city with its new harbour, as may be conjectured from a Kēralōlpatti (history of Kerala).

We recall here that in Sabr-Isho's time "The first series of regular observations, with the aid of fairly accurate instruments, appear to have been made at Gondeshāpūr, in the south-west of Persia, in the first years of the ninth century of our era. During the Califate of al-Ma'mūn (A.D. 813-833), at the observatory at Baghdād, all the fundamental elements of the *Almagest* were verified—the obliquity of the ecliptic, the precession of the equinoxes, the length of the solar year, etc."—(G. R. Kaye's *A Guide to the Old Observatories at Delhi, &c.*, Calcutta, 1920, pp. 76-77). Probably Sabr-Isho the Persian, and his Persian engineer were instrumental in starting the Quilon era.

Gundeshapur, old Baith Lapat, had bishops from even A.D. 225 ; and the Baghdad territory too from that date. Persians must have come to Quilon even in the pre-Quilon-Era centuries. In about 400 A.D. a Theban scholar arriving in a ship, and residing in Muziris, in Cochin, speaks of Persians (and Ethiopians = Arabs of Ethiopia) even in Ceylon. Its king in about 50 A.D. had sent even to Rome along with a stranded Roman freedman four ambassadors of whom the chief was called Rachia (= Rājāyā, or Raja, or Rāghava ?). Q. E. 7 fell in Kulasekhara Alwar's days.—T. K. J.

REVIEWS

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MAHAMAHOPADHYAYA PROF. D. V. POTDAR COMMEMORATION VOLUME: "studies in Historical and Indological research presented to him by his friends and old pupils in honour of his 61st birthday"; edited by Dr. Surendra Nath Sen, M.A., Ph.D., B.Litt., Delhi.

English section pages 1-383, with Index, and Marathi section pages 1-177 with a list of his numerous articles, covering pages 157-168, and an Index. A brief chronology of the events of Prof. Potdar's life from 1890 to 1950, in 2 pages in English, and 5 pages in Marathi. Bharat Itihas Samashodhak Mandal, Poona, Rs. 16.

As the Preface says, the articles (41 + 13) by researchers from Patiala to Trivandrum and from Jodhpur to Gauhati cover a wide field, and throw light on many abstruse problems, a few of which are: (1) *Was there an Original Shorter Gita?* (No), by Sri P. G. Divanji, Bombay; (2) *The Chinese Origin of the English Word Rice* (Latin *Oryza* from Greek *Oruza*, from Ningpo Chinese *Ou-Li-Zz* meaning Good-Grain-Food, fine cooked rice), by Sri S. Mahdihassan, Bombay; (3) *The Boar* (cloud-god) *in Mythology and Folklore*, by Sri S. Kakati, Gauhati; (4) *Jainas and Jainism* (its doctrines, philosophy and logic), by Dr. A. N. Upadhye, Kolhapur; (5) *Association of Sita and Pūṣan in Rgveda and its Astronomical Significance* (i.e., the simultaneous rise of Revati asterism and the beginning of the wheat-sowing season), by Sri B. R. Kulkarni, Dhulia; (6) *Karma in the Bhagavad-Gita* (Karma in its two-fold aspect, viz. activity, and the binding power, which latter is dependent on the frame of mind behind the activity), by Dr. G. V. Devasthali, Nasik; and (7) *Sufi's Stages* (four, viz. humanity, path, knowledge, and truth: *Shariat, Tariqat, Marifat and Haqiqat*), by Prof. Bhagawat Dayal Verma, Poona.

Many new historical facts and dates are offered in the articles: (1) *A Tamil Account of Sivaji's Expedition to the South and the Mughal Siege of Gingee*, by Prof. C. S. Srinivasachari, Ramnad; (2) *Some Gaps in the History of Vaisali* (esp. the blank of 800 years from ca. 480 B.C.), discussed by Dr. A. S. Altekar, Patna, in the light of the coins, etc. discovered during the excavations at Vaisali, 1950, by Sri Krishnadeva; (3) *The History of Maize (Maka) in India between A.D. 1500 and 1900*, by Prof. P. K. Gode, Poona; (4) *New Light on Later Pallava Chronology* (from Nandivarman II, A.D. 731-96 — and not 717-779 or 710-75 — down to Aparajita, 879-897); (5) *The Author of the Silathambhas*

of *Asokan Inscriptions* (almost all the *sthambhas*, monolithic pillars, having been set up at Asoka's command itself; the elephant, bull, horse, lion and wheel associated with them symbolising probably the Buddha's conception in his mother's womb, the zodiacal sign of his nativity, his great departure from home, his pre-eminence among the Śākya, and his setting in motion the law of righteousness), by Prof. Gurty Venket Rao, Waltair; (6) *Buddhist Motifs in Byzantine Architecture* (262 B.C. to 328 A.D.), by Sri V. N. Talvalkar, Chembur; (7) *Bahnani Coinage as a Source of Deccan History* (1347-1537), by Sri H.K. Sherwani; (8) *St. Thomas's Tombs, Skeletons, and (undecayed) Bodies* (six, five and two respectively; the 2nd tomb at Mylapore, 1293 A.D., being that of a Nubian Muslim *avāriān*, i.e. of a Tōmā (Arabic *Tawwāmā*, or *Sawwām* ?), who was killed accidentally by a *Pariah* fowler at Mylapore with his arrow, quite unlike real St. Thomas who was deliberately killed as a martyr for Christ by soldiers or by a priest, as *The Acts*, ca. 210 A.D., and the *Passio*, ca. 500 say), by T. K. Joseph, Trivandrum; (9) *Inscriptional, Archaeological and Sculptural Value of the Pandava-Lena Caves at Nasik* (mainly and primarily Buddhist caves, dating probably from before 110 B.C., with paintings all obliterated), by Sri Y. R. Gupte, Poona; (10) *Further Archaeological Traces of Buddhism in Gujarat* (on Tārangā Hill, 5th-6th cent. A.D., at the northern end of Gujarat, and at Nagarā, a small village about 3 miles north of Cambay, prob. 7th cent. A.D.), by Dr. H. D. Sankalia, Poona; and (11) *Method of Archaeology and Archaeological Excavations* (discussing practically, with expert knowledge, Archaeologist's equipment, excavation, photography, practical hints, pottery, etc.), by Sri S. K. Dikshit, Poona.

— T. K. JOSEPH

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## Kalaminā and Kala of India, CA. 650 A. D.

BY

T. K. JOSEPH,

~~Trisandram~~, Travancore

### I. ST. THOMAS'S BURIAL PLACE 5

In ancient documents dating from about 200 A.D. to 1293 six places are found mentioned as the burial-sites of St. Thomas' body, as distinct from the six places of subsequent depositions of his bones: (1) in the west (1st cent.), (2) in Edessa (modern Urfa in upper Iraq, 232-3 A.D.), (3) in Chios Island west of Asia Minor (ca. 1144 A.D.), (4) in Ortona St. Thomas Church, in Central Italy's eastern part (in 1258), (5) in Goa St. Thomas Church, (Mylapore bones of 1522), and (6) in Mylapore Church, near Madras (bones of 1523 A.D.).

The places of first burial of the body are:—

1. A tomb of the former kings, on a mountain<sup>1</sup> in the kingdom of Mazdai (a king with this regular *Old-Persian* name), which was

1. This mountain in the kingdom of Mazdai appears as the Little Mount or St. Thomas Mount, both S.W. of San Thome in Mylapore, where, from the 13th century, the body of St. Thomas or of a Muslim saint has been said to have been buried in the first century (in 68 A.D. acc. to Mylapore, or in 72 acc. to Malabar), or (in the case of the Muslim) in some year between 622 and 1293 A.D.

W. Germann (*Die Kirche der Thomaschristen*, 1877, pp. 272-3, quoting *Novus Orbis*, p. 95, and referring to Raulin, 385) says: (After Sept. 22, 1500 A.D., the date of Cabral's arrival in Calicut, while he was in Cochin lading his ships), he "evaded the danger" (from the Zamorin's fleet's attack on them) "they came to a certain Island where the body of St. Thomas rests. The chief of this island received the Christians very honourably and gave to ours relics of the holy body in token of friendship".

Which island was this? Cabral evaded the Zamorin's ships by "gaining the high seas and making use of a north wind, which the enemy, accustomed to hug the coasts, did not know". It was the N.E. Monsoon wind of October and subsequent months. So the island could not have been Mylapore, and before 1523 and 1522, when St. Thomas' bones and other relics were taken out from two St. Thomas tombs opened by the Portuguese in those two years, there were no relics of St. Thomas there capable of being presented to Cabral (1500 A.D.) or others. Was Barbosa then (1500) with Cabral, or with

distant only about a day's journey by bullock-cart from the kingdom of Gundaphar (or Gudnaphar) "King of the Indians", and of his brother Gad, identified by modern historians with the Parthian king Gudaphara (= Gk. Gondophares, A.D. 19 to ca. 55) of Taxila, in the Panjab, and Guda or Gadana, a relative of Gudaphara. King Mazdai was probably a Viceroy under Gudnaphar. The mountain, the royal dynasty's tomb there, and the above three royal names are mentioned in the Syriac *Acts of Judas Thomas*, of A.D. 200-220. If the identification of Gudnaphar and Gad with the Taxila king Gudaphara and his relative Guda or Gadana mentioned in contemporary coin-legends is accepted, St. Thomas' (temporary) burial tomb on a mountain must have been in the Taxila region in North Panjab, and not in Mylapore far away in E. India.

The above *Acts* says that in king Mazdai's life-time itself the royal tomb of the saint was opened by him; but he could not find the bones in it as they had been "secretly removed by the brethren to the west". This first removal was not to Edessa far to the N. W. of Taxila, because it was in or shortly after 232-3 A.D. that the bones were obtained (by a merchant as St. Sphrem says about 363 A.D.) from "the princes of India, to whom the Roman Emperor Alexander Severus wrote at the request of the Christians of Edessa", when he conquered it in 232-3 A.D. These particulars within quotation marks are mentioned in the Latin work *Passio Thomae* of ca. 500 A.D. The first transfer of the Apostle's bones 'to the

his uncle at Cannanore? Barbosa the historian came in 1500 with P. A. Cabral.

The only island to which the north wind could take Cabral's ships from Cochin was the Maldiv group S.W. of Cochin. And we are fairly sure that "the two Islands *Male* and *Female*, lying about 30 miles distant from one another, . . . . . (where) the people are all baptized Christians", described by Marco Polo (ca. 1293) are the *Male-dives* and the *Lacca-dives*, though Marmadit where (and in Ceylon and Socotra) Elias, Metropolitan of Damascus (A.D. 893) locates a Bishop "subject to Persia", may not be the Maldives, but Marma-goia in Goa.

How, and when, did the tradition arise that St. Thomas' body rested in the Maldives? Was it an undecayed body like the two (in Edessa, not elsewhere) of St. Thomas, mentioned by Mar John III (ca. 1122) and by Bp. Eschilinus (*florit* 1370), or like the undecayed hand or arm and finger of St. Thomas still shown in Italy? Preservation of dead bodies of human beings was practised in the East, among the Mongols, for instance. See *Marco Polo*, Vol. I, 1903. St. Xavier's body is still preserved in Goa, we know. The body of Alexander the Great was preserved for some time in honey.

west' was probably to the palace<sup>2</sup> or the Church of King Gudnaphar who had already been converted to Christianity by the Saint (say in ca. 32 A.D., or in ca. 40 A.D. according to Sir John Marshall's *Guide to Taxila*, Calcutta, 1918, p. 21). King Mazdai it was, who had St. Thomas killed by his (four) soldiers with spears, and "the brethren", i.e. the St. Thomas Christians in Gudnaphar's and Mazdai's territories had therefore reason to fear that the tomb and the bones of "the Hebrew sorcerer who had bewitched Mazdai's queen, his son and others" (i.e. made them Christians) would not be safe on the Apostle's enemy's mountain. So they removed them "secretly" to the capital of Gundaphar to the west of Mazdai's mountain.

2. The other place of first (permanent) burial in India is our *Calamina*, a town of India in the easternmost part of Parthia, which extended "from the Tigris to the Indus", and had the river Jhelum in it. This Calamina we shall deal with at some length in the sequel. It could not have been Mylapore on the east coast of South India, but was probably the second site (to the west) mentioned above, in para 3, ¶ 4.

3. The third place of original burial of St. Thomas' body is said to be Mylapore, the actual site of one tomb being called San Thome (= St. Thomas). It seems that the site was called by this very name by Friar Jordanus (1321-27 A.D.) who said he was going south from Thana north of Bombay to Quilon (in Travancore) and to "St. Thomas", evidently the tomb-site since called

2. Latin *Passio Thomae* (ca. 500 A.D.) gives the name of Gundaphar's city as Eliophorum. This may be the truncated form of the Taxillan Prakrit corruption of Sanskrit Taksha-*śilāpuram* (= the city of Taxila), 'the name of Gondophorus' city. *Śilāpuram* or its Taxillan vernacular form, heard by the author of the *Passio* (6th century), or other Europeans could become Eliophorum, which occurs also in the Latin text of the Mozarabic Breviary.

in the early part of that 6th cent. Cosmas (ca. 525) found multitudes of Christians in N.W. India—in the Hun empire of Mihira-Gula, whom he calls "Gollas". From those Christians, or those who had visited them, the author of the *Passio* could get the name of the ancient capital city, and some other details he has included in his book—e.g., (1) that in Sandaruk, the city in which St. Thomas first landed on his way to the mouth of the Indus, "there is still the see of St. Thomas there", (2) that to meet King Mazdai St. Thomas went (from Gundaphar's kingdom) to "Superior India" i.e. India up the river Indus. He converted Sandaruk into Andrapolis: so to him *Śilāpuram* could be *Ilāpuram*, or Eliophorum, *a la Latin*. See note 19.

He mentions also "Mount Gazi" of Eliophorum, which may be Mount Hathial of Taxila. *Hathi* of Hathial could become Gazi in the Latin author's mouth.



San Thome, by the Portuguese (after 1498). This tomb is on the sea-shore, and not on a mountain, nor to the west of a mountain as was the case in the description given in the Syriac *Acts* (200-220) cited above. The two mounts (St. Thomas Mount and the Little Mount) near the Mylapore tomb are respectively 5 miles and 2 miles S. W. of the San Thome tomb now inside the San Thome Cathedral. Neither was it in the easternmost part of Parthia as St. Isidore said in ca. 630 (see *infra*).

4. Besides the above there was another St. Thomas tomb in San Thome, opened in 1522. Its contents are in Gao. See No. 5 of para 1 above. No. 3 above in San Thome was opened in 1523, its contents being in San Thome Cathedral, No. 6 of para 1 above. See note 24.

5. The big tomb of St. Thomas and his priest in Tiruvāmcode church yard, South Travancore, See Note 16.

6. The Maldiv tomb of 1500 A.D. in Note 1, paras 2 ff.

And although the Alexandrians,<sup>3</sup> the Arabs, and the East Syrian Christians (Nestorian and pre-Nestorian) of Iraq and Iran, and also China and Italy had commercial or ecclesiastical relations with South India by sea in the early centuries, no mention<sup>4</sup> of St. Thomas' work, death, or tombs in Mylapore, or pilgrimages thereto is found in their documents so far discovered, the earliest definite mention of a Mylapore tomb, miracles, and pilgrimages being by Marco Polo in 1293. See his *Travels*, Vol. II, Bk. 3, Ch. 18, and 17. The mention of St. Thomas' burial in Mahluph, by Mar Solomon, Metropolitan of Basrah (ca. 1222), is not decisive as the

3. The name Muziris for the most ancient Malabar port and emporium cannot be derived from Tamil. Was it a Misri port?, i.e. a port of the people of Misr — Egypt. Sala-Misri is the Malayalam name of a kind of foreign tuber (of the plant *Orchis Mascula*?). The name means salep of Misr, Egypt. *Thaleb Misri* is its Arabic name. Ptolemy of Egypt (ca. 140) mentions (before Islam was founded) Muziris, and other localities in Malabar. So Muziris cannot be from the Arabic word *Musrik* denoting non-Muslims, infidels.

4. Arab travellers mention *Betumah*, which is wrongly interpreted as *Baith-Toma*, i.e. the house of Thomas, and identified with Mylapore. Col. Gerini says it is *Tamus*, or *Tamarus promontorium* of Strabo, Mela, etc., commonly called *Samara* after the fifth century. The Malays call it *Tamasak* and the Chinese *Tan-ma-hsi*. See his *Researches on Ptolemy's Geography of Eastern Asia*, Asiatic Society Monographs, Vol. I, London, 1909, p. 199. In his Synoptical Map in that volume *Betumah* is marked east of Singapore, as the S.E. extremity of the Malaya Peninsula.

MSS. (known till 1925 to Dr. J. Leveen of the British Museum) differ in their texts thus :—

“Thomas was from Jerusalem, of the tribe of Judah. He taught the Parthians, Medes and Indians, and because he baptised the daughter” (no, the wife, son and sister, says the *Acts* of 200-220) “of the king of the Indians” (viz. King Mazdai, and not Gundaphar) “he stabbed him with a spear” (no, his soldiers did it), “and he died. Habban the merchant” (no, Khabin), “brought his body” (wrong, for bones), “and laid it in Edessa, the blessed city of our Lord. Others say that he was buried in Mabluph, a city in the land of the Indians”.—Vide his *Book of the Bee* in Syriac.

The variant readings are :—

(a) “He taught in India, and Sind, and Persia”.

(b). “He was buried in India”. These are found in the Oxford MS. of the *Book of the Bee*. Was Muhluph in the original MS. by Mar Solomon? None can say. His contemporary, the Syrian Mar Jesu-sab, Bishop of Soba or Nisibis near Edessa (in office A.D. 1190-1222 and later), says vaguely like the Oxford MS. thus: “Besides, we too have . . . . the corpse of Saint Thomas the Apostle in India”, because the body was buried on Mazdai's mountain in some part of India as the Syriac *Acts* told the Bishop. Other ancient Syriac works also mention India vaguely.

e.g. (i) *The Doctrine of Addai*, ca. 200.

(ii) *The Doctrine of the Apostles*, ca. 260.

(iii) *St. Ephrem's Hymns*, ca. 363, well-known to the Bishop.

This Bishop had probably died before Mar Gregorius Bar-Hebraeus (b. 1226, d. 1286), the most notable of Syriac authors, wrote (a) in his *Syriac Chronicle* that St. Thomas' “body was buried at Calmania” (in India), and “thence translated to Edessa”, and (b) in *Horreum Mysteriorum* that “Thomas preached to the Parthians, Medes, and Indians, and was killed at Calamina and his body” (i.e. his bones) “was translated to Edessa”. Bar-Hebraeus<sup>5</sup> the well-read historian, and a contemporary of Marco

5. Bar-Hebraeus or Ab'l-Faraj (1226-86), Maphrian or Catholicus of the Monophysite church, wrote several works in Syriac and Arabic. Born at Malatiah on the Upper Euphrates, he was made bishop of Gūbās near it in 1246. In 1253 he was bishop of Aleppo; in 1264 he was made Maphrian. His great historical work is the *Chronicle* in Syriac, the first part of which deals with secular events from the creation downwards, the 2nd mainly with the patriarchate of Antioch, and the 3rd with the eastern half of the Syrian church.

Polo who in 1293 heard several diverse particulars about the Mylapore tomb, the Muslim *havarian* or St. Thomas buried in it, and the Muslim and Christian pilgrimages to the tomb, had chances of hearing the same details from pilgrims or others who had been to Mylapore or to Malabar. And he must have read also the Edessene works the *Acts* and the *Preaching of the Holy Apostles*,<sup>6</sup> and other Syriac writings, and Church documents (the liturgies, calendars, breviaries, martyrologies, &c.), and found in them a mountain of India or Calamina alone mentioned as the place of the Apostle's burial. Yet he did not reject Calamina in favour of Mylapore, or assert that the two are identical. Even the Malabar Syriac liturgy, the Catholics' *Dukhrana Office* for the octave of St. Thomas, and other Malabar Syriac records have not dared to give Mylapore<sup>7</sup> or even Calamina definitely as the burial place of St. Thomas.

## II. CALAMINA, KALAMINE

The earliest known datable mention of Calamina, (Latin form) seems to be by St. Isidore<sup>8</sup> of Seville in Spain, who died in 636 A.D. In that voluminous writer's *De Ortu et Obitu Patrum* ("of doubtful authenticity"?) we find :

"Therefore, this Thomas preached to the Parthians and the Medes, up to the furthest eastern part (*ad extremam orientalem plagam*) and there preached the gospel" (to the Indians also, by implication) "and suffered martyrdom. Indeed, being pierced with a lance, he died at Calamina, a town of India, and was honourably buried there on the 12th before the Kalends of January" (= December 21).

In his *Etymologiarum Liber* the same author says: "From the frontiers of India as far as Mesopotamia (this land) is generally called Parthia. On account of the unconquered strength of the

6. *The Preaching of the Apostles* is different from the *Doctrine of the Apostles* (ca. 260 A.D.).

7. Of the Malabar syriac office Fr. Bernard the reputed Malabar church historian says: "The Divine Office for the feast of July 3rd is the most ancient and appears to have been composed by the Indian Prelates of the first or second century". A (Tamil) St. Thomas "*Charitam*" (= History) finished in 72 A.D. is also said to exist. But no copy of it has yet been discovered, nor has evidence of its existence at any time been adduced so far.

8. Isidorus Hispalensis (ca 570-636), Spanish encyclopedist and historian, was famous as a doughty opponent of the Arians. He was ordained bishop in 609. His chief work is *originum sive etymologiarum libri XX* (between 622 and 633). *De ortu ac obitu patrum* qui Scriptura laudibus efferuntur, from which we have quoted, is said to be "of doubtful authenticity" in *Ency. Brit.*, 1946. If so is it earlier or later than ca. 630? See IV, end.

Parthians" whose rule had ended in 222 A.D., four centuries before Isidore) "both Assyria and other neighbouring regions changed their names to that of Parthia. There are, therefore, in it Arachosia (= modern Kandahar). Parthia, Assyria, Media and Persia, which being united to one another begin from the river Indus and are enclosed by the Tigris. They are mountainous and rugged, having the rivers Hydaspes" (= Sanskrit Vitastā modern Jhelum, about 100 miles to the east of even the Indus given by him as the boundary) "and Arbis".

Two centuries before Isidore, Orosius (d. 417) wrote (in *Hist. Lib.* 1.2) to the same effect thus: "From the river Indus, which is in the East, as far as the river Tigris, which is in the West these are the regions: Aracosia (= modern Kandahar), Parthia, Assyria, and Media. They are mountainous and rugged. . . . the chief rivers. . . . Hydaspes (= the Jhelum, east of the Indus) are in the middle of these" (i.e. between Mount Caucasus, the northern boundary, and the Southern Arabian Sea and the Persian Gulf). "In these there are 32 tribes. But generally the country is called Parthia, although Holy Scripture calls the whole Media".

St. Isidore (or a Pseudo-Isidore?), we see, locates Calamina in India in the furthest eastern part of Parthia where there was not only the Indus but also the Jhelum, about 100 miles to the east of it. By the furthest eastern part he did not mean the easternmost (Mylapore or other) parts of India proper, or of Asia with China as the extreme oriental region. And no document prior to the 13th century — (not even the Malabar Catholic Syriac *Office* for the 8 days' *dukhrana* (= remembrance) of St. Thomas, alleged<sup>9</sup> to have been composed in Malabar in the 1st or 2nd century) — expressly mentions Mylapore, or even Coromandel or Chola<sup>10</sup> or Betuma as the burial place of St. Thomas.

9. See note 7.

10. According to Malabar Christian tradition, which is not found recorded in any form, wholly or partly, before the 13th century, St. Thomas came to build a palace for the Chola King whose Hindu name is not found mentioned, though in the Syriac *Acts* of 200-220 he is Gundaphar, whom scholars have identified with Gudaphara, the Parthian King (19—ca. 60 A.D.) of N.W. India.

Recently Malabar writers began to admit that, as authoritative historians say, St. Thomas went to N.W. India on his first missionary journey, and add that thereafter he came to South India along with Habban in 50 A.D. or 52 A.D. etc. from there direct, or after returning to Jerusalem, and built a palace for the Chola King. Those writers have nothing to say about the palace built for Gudnaphar, or about Habban's accompanying him to Gundaphar's city also, except that the *Acts* (200-220) is wrong, and the Malabar tradition is right.

The Latin work *Passio Thomae* (ca. 500 A.D.) says without mentioning the name Sandaruk (probably Alek-Sander-uk, i.e. Alexandria among the Oritae, founded by Alexander the Great in Baluchistan, west of the river Hab, on his way back from India), that "there is there the see of St. Thomas to this day" (i.e. even in ca. 500), and adds that after meeting King Gundaphar of the Indians, and effecting miraculous cures St. Thomas went to "Superior India" — "*profectus est autem Apostolus ad Indiam superiorem per revelationem*", "i.e. further to the north, or to the south, or to the east", says Medlycott in his *Thomas*, 1905, p. 258. Why not even to the west?

To the author of the *Passio* South India could never have been superior India. On the other hand N.W. India of Gondophares, through which the Jhelum and the Indus flowed as St. Isidore (d. 636), and Orosius (d. 417) said (see *ante*), was superior India. We may infer, therefore, that Isidore meant the superior part of India as the scene of St. Thomas' preaching and martyrdom.

Another *pre-Marco-Poline* record (which is not of distant Europe, but of Syria) speaks of it as "interior India", which cannot be South India or its east coast, where the "Muslim — St. Thomas tomb" was in existence in 1293 A.D. That document, a British Museum Syriac MS. of 874 A.D., says: "The Apostle Thomas preached . . . . in India Interior, and taught and baptized and conferred the imposition of hands for the priesthood. He also baptized the daughter" (no, the queen, son, and daughter-in-law) "of the King of the Indians" (Mazdai, as the Acts says). "But they slew him with spears<sup>11</sup> in Kalimaiya<sup>12</sup> (or Kalimiya). His body was brought to Edessa and there it rests". (Body is found used instead of bones in several documents. So also head for skull). The W. Asian or Persian author who wrote as above in Syriac could not possibly describe Mylapore as situated in 'interior India'. Even in the wrong Geography of Ptolemy (ca. 140) it was not in the interior of his 'India intra Gangem', i.e. India on this side of the Ganges.

11. "Berumhe" is the word in the Syriac MS. It means "with spears". But some wrongly translated it as 'by Brahmins'. It was Dr. Leveen of the British Museum who found out the mistake and corrected it. The Brahmin murderer or murderers of St. Thomas figured in Malabar tradition not before the above mistaken reading and translation. The Brahmin priest very probably reflects the "Sun-temple priest" of the Latin *Passio*. brought to Malabar by the Portuguese.

12. See note 28, para 2.

Authors of Latin and Syriac records mentioning Calamina (like Isidore of ca. 630, who knew Greek also, or a Pseudo-Isidore, and the author of the Syriac MS. of 874, who too probably knew Greek as many Syrians knew in the early centuries) might probably have got the name from Greek records, several of which have survived. Medlycott has cited them in his *India and the Apostle Thomas*, 1905. Some of them were possibly written by Syrian authors themselves. The specification "Superior India" found in the Latin *Passio* (ca. 500) was perhaps borrowed from the Syrians who were not far from N.W. India, or the Greeks who were scattered in all parts of the Parthian empire from B.C. 248 to A.D. 222, acc. to Wm. S. Haas, *Iran*, N.Y., 1946, p. 17).

Some Greek passages mentioning Calamina as the burial place of St. Thomas are given below:—

1. Pseduo-Hippolytus says: "And Thomas preached to the Parthians, Medes, Persians, Hyrcanians, Bactrians, and Magians, and was thrust through in the four members of his body with a pine spear at Kalamênê, the city of India, and was buried there". Real Hippolytus who lived and wrote in Rome died in ca. 139. But the date of the above Pseudo-Hippolytus is not known.

In this passage *Parthians* are the hardy, warlike people of Parthia, a small district to the S.E. of the Caspian Sea. The *Medes* were in Media S.E. of Lake Urmia. *Persians* were originally the people of Parsua, west of late Urmia, but the name came to be applied to all in Persia. *Hyrcanians* were in Hyrcan, S.E. of the Caspian. *Bactrians* were those in Bactria, N. Afghanistan, between the Hindukush and the Oxus. *Magians* were the Magi (Priests), a name "derived from a Median tribe, which is identical with the Median priestly caste, or had, like the Brahmins in India, the privilege of supplying the members of the priestly profession", as W.S. Haas says in *Iran*, N.Y., 1946, p. 17.

The 2nd extract *infra* has Germans, wrongly for Karmanians, those of Kerman in the middle of East Persia. If Magians therein are not the Magi (*ante*), but Margians, these people were the inhabitants of Margiana on the river Margub (Murghab), chiefly residing in the Oasis of Merv, which has preserved the name (Margiana).

In the above extract we find the Parthians and the Medes of St. Isidore's statement (*ante*, § II) given prominence; spearing and burial in the Indian town called Calamina too are reflected. Perhaps both Isidore and Pseudo-Hippolytus borrowed those details

from some other source or sources, probably in Greek or Syriac of one of the early centuries.

Pseudo-Hippolytus, like several other writers (some cited below), explains as it were the term Parthians used by Isidore by adding Persians, Hyrcanians, Bactrians, and Magians to his indefinite "Parthians and Medes", a stereotyped expression used often in the Old Testament<sup>13</sup> in the form the "the Medes and the Persians". "The law of the Medes and Persians" has become a well-known idiom in English and some other European languages.

2. Pseudo- Dorotheus' statement is:—"Thomas the Apostle having preached the Gospel to the Parthians, Medes, Persians, Germans" (ought to be Karmanians), "Bactrians and Magians, suffered martyrdom at Kalamite (wrong for Kalamine), a city of India so named". Since *n* and *l* (small) of Greek are not easily distinguishable in cursive script there is Kalamite here as a wrong reading. Real Dorotheus, Bishop of Tyre, is said to have flourished at the end of the 3rd century.

3. An anonymous Greek author says: "Thomas the Apostle, as the tradition of the elders discloses, preached the Gospel of Christ to the Parthians and Medes, the Persians and Germans" (wrong, for Carmanians), "the Hyrcanians and Bactrians; he fell asleep in the city of Kalamine in India". (This Greek writer's works were published with those of Occumenius, Bishop of Trikka in Thessaly, about 990 A.D.)

4. In the same century (the 13th) as the Iraqi Bar-Hebraeus' (1226-86 A.D.) who points to "Calamina . . . . away (not far) from a mountain of India which the Apostle ascended" — "*in montem Indiae ascendit*", as well as the century of Marco Polo's Muslim, Gobi, and Christian contemporaries of 1293 A.D. in Mylapore, of whom the Muslims asserted that a Nubian Saracen *avariyan* (saint) lay buried in the tomb there, which the Christians assigned to St. Thomas, a Greek MS. recorded that "Thomas the Apostle, as has been handed down to us, preached the gospel of the Lord to the Parthians, Medes, Persians, Carmanians, Hyrcanians, Bactrians, and the Magi. He fell asleep in the city

13. In the New Testament too we find in the Acts of the Apostles (1st cent.) Parthia and Media linked together: ch. 2 "Parthians, Medes, Elamites, residents of Mesopotamia . . . . visitors from Rome, Jews and proselytes, Cretans and Arabs", in Jerusalem heard in their own "foreign languages" whatever the Spirit prompted them to utter" (verses 9-11, and 4).

of Kalamina of India." Here too we find Isidore's Parthians and Medes expanded to include almost all the peoples of the Parthian empire of the days of St. Thomas, the Parthian King Gundaphar (Gudaphara), and (his Viceroy, or Satrap ?) King Mazdai (bearing a regular *Old-Persian*<sup>14</sup> name). In Bar Hebraeus' list there are "Indians" *expressly* mentioned, over and above "the Parthians, Medes, Persians, Carmani, Bactrians and Magi", although in St. Isidore's statement (§ II *supra*) "Indians" are only implied in the expression "he died at Kalamina, a town of India", which must naturally have had Indians in it, who too certainly heard St. Thomas' preaching to the Parthians in the town and its neighbourhood.

Early in the same 13th century in which we find the Mylapore tomb mentioned for the first time in known documents as a Muslim saint's tomb and St. Thomas's tomb, the "Constable of Armenia", i.e. the general of the army, wrote in 1248 to Henry de Lucignan, King of Cyprus, a report in which occurs this passage :

"But in the land of India where the Blessed St. Thomas preached and made converts" (unlike other parts of the Orient where the "Cham" (= the Khan) restored his Christian subjects to liberty and forbade under severe penalties that any one should offend them in deed or words), "there is yet a certain Christian king, who was much oppressed by other Saracen kings, his neighbours, who waged against him a rude and relentless war, until the Tartars came to those parts, and then he submitted to obey them, and joining arms with them, he so attacked his enemies the Saracens that he conquered a good part of the Indies", . . . . . *Vile F. Bergson's Relutions des Voyages en Tartarie*, Paris, 1834, pp. 303-4.

This land of India where St. Thomas preached and made converts, and where there were Muslim kings, and which the Tartars,<sup>15</sup> invaded and conquered in or before 1248 could not be South India. The Constable did not visit the Southern part of India, but the Christians and churches in Casrat and Canguth (= Kashgar and Tangut, near N.W. India) and perhaps also in that part of India. There was in 1248 no St. Thomas tomb or his bones there, because the bones of St. Thomas had been taken in or shortly

14. Not only Mazdai, but also Vizan and Manashar, the names of his son and daughter-in-law are Old-Persian, acc. to Dr. F. C. Burkitt.

15. The Constable's letter of 1248 falls in the reign of Nazir-ud-din (1246-66) in India, and recalls probably the invasion of India and capture of Lahore in 1241 by the Mongol hordes, though he speaks of the "Tartars".



after 232-3 A.D. to Edessa, and were in Chios in 1248, though there was a Christian king and Christian<sup>s</sup> somewhere there, and possibly their church was called a St. Thomas Church. He heard of the king, and his troubles; and as from the ancient Armenian translation of the Syriac *Acts*, or from N.W. Indian tradition he knew that St. Thomas preached and died in N.W. India of Kings Gundaphar and Mazdai he could describe that Indian Christian king's and the Saracens' and Tartars' region of India as "India where the Blessed St. Thomas preached and made conver~~ts~~<sup>ts</sup>".

The undated Greek documents (1 to 3) cited above are supposed by Bishop Medlycott (in *Thomas in India*, 1905, p. 161) to be of 650-750 A.D. And Fr. Hosten, S.J., says (in *Antiquities*, 1936, p. 366) that "We find Calamina again in a series of Greek lists of the Apostles, all anonymous, the dates of which may by and by be found to be respectably ancient; we find it in Syrian and Latin works, and Latin martyrologies of the 9th and 10th centuries, the authors of which we may safely think did not suddenly agree to invent it, but copied it, as conscientious historians cannot help doing, from earlier materials". (Medlycott does not cite Isidore of Seville, d. 636).

Of such materials the only one that contains the shortest list of peoples (Parthians and Medes alone, with Indians of Calamina implied) is St. Isidore's statement cited supra in this §. We may, therefore, regard it as one of the earliest, non-extravagant documents mentioning Calamina. As we come down the centuries we find Germany, South India, Ceylon, Malacca, China, etc., and even Brazil in America added to the sober, modest, list of regions evangelized by St. Thomas; we find also Qantaria (in *Ethiopic Acts of Thomas* = Gandhara), Mylapore (1293 A.D.), St. Thomas Mount S.W. of Mylapore, Tiruvāmkōdu in South Travancore,<sup>16</sup> Karmania<sup>17</sup> north of Makran in S.E. Persia, Kalayamuttūr near the

16. The big tomb in the southern yard of the "Tarīsā" (= Syrian Christian) church (pre-Portuguese) at Tiruvāmkōḍu was, until the last generation, a signed by the parishioners to St. Thomas and a priest who came with him to that place from Mylapore along with the first century ancestors of the "Tarīsās" there. St. Thomas brought them there to escape persecution. Such was the Tiruvāmkōdu tradition. But the present generation wisely omits from it the death and burial of St. Thomas in their parish. In course of time will his death and burial in Mylapore too be omitted from the South Indian tradition?

17. Karmania in Persia was first suggested by W. R. Philipps in 1902 in the *Indian Antiquary*, and in 1912 or so Fr. Dahlmann, S.J., of the Catholic University, Tokyo, did the same in a book of his. Both these were thus

Palni Hills N.E. of Travancore-Cochin and west of Madura<sup>18</sup> and one or two other localities<sup>19</sup> mentioned in the course of the centuries from say 500 A.D. down to the 20th century. We find also a plethora of speculations on the identity and interpretation<sup>20</sup> of Calamina from the 17th to 20th century.

*disallowing* South India's claim dating allegedly from 50 A.D. or 51, 52, 52-3, 67, 78, or 84 acc. to Malabar versions of the tradition, not found recorded in the first 12 centuries, or dating at least from 1293 when Marco Polo was told that the Muslims asserted that the Mylapore tomb was of a Saracen Muslim saint from Nubia.

18. *Kalyamuttūr* (= Kalamina) was suggested recently by Mr. A. Balakrishna Pillai, M.A., of Travancore, the author of numerous articles in *The Hindu* of Madras and other papers and Journals, on historical topics. The two names have Kala-m in common, that is all.

19. Iotha (a nominative of Iothabis) is mentioned as the place of where St. Thomas is buried (in a list of burial places of the 12) in *Codex Fuldensis*, the famous MS. of the Diatessaron, written for, and corrected by Victor, Bishop of Capua, in 546. The entry for Thomas is *Thomas-in-India-civitate Iothabis*.

This cannot be a reference to Calamina or Mylapore. Probably it is Iorha, i.e. Syriac URHA = Edessa, where the bones of St. Thomas have been since 232-3, or shortly after.

In about 500 Eliophorum is mentioned in the *Passio*. (See note 2). It cannot be Ma-ilaipuram (= Mylapore) as the author has only "superior India" as St. Thomas' place of death and burial. Dr. Medlycott says in his *India and ... Thomas*, 1935, p. 258, that "The Latin expression 'superior', used above, is susceptible of various meanings, and can equally be applied whether the Apostle proceeded further to the north, or to the south, or to the east" (or even to the west): "it is a generic form of expression, therefore inconclusive for the purpose of indicating the direction taken. But the recital in the (Syriac) text, first given, is somewhat more definite - 'whither our Lord told him'. This further corroborates the idea that up till then Thomas had not entered that particular section of India to which by revelation he had been directed to proceed", "to erect a palatial building in India" (p. 251) for Gundaphar.

But the Lord's telling or revelation here is *not* "the vision-admonitions he received of his future destination to India" (*ibid.* p. 251), before St. Thomas met Habban *outside India*, i.e. in W. Asia, but a much later admonition received *after* his arrival and work in the cities and villages in Gundaphar's kingdom *in India*, and before his journey in a bull's cart to Mazdai's kingdom where he was martyred. This admonition is in Acts II and III and not in Act I of the Syriac text, which says: "And the Apostle went forth to go whither our Lord had told him" (while he was asleep in Gundaphar's city). "And ... he came near the second milestone" from the city. See the end of Act II, and the opening of Act III in Syriac and in Greek.

20. Fr. A. Kircher, S.J., in 1667, seems to be the first to regard Calamina as a descriptive word, or a mere statement of a circumstance, and to interpret it as such. He said (wrongly, of course), that Calamina was Tamil *Calur-mina*, meaning 'on the stone'. But there is, or was no such Tamil expression. On the stone is *kallin-mel* (கல்லின் மேல்) in Tamil. Perhaps he meant

But confining ourselves to the earliest mention (by St. Isidore) of Calamina as a town situated in India of the Indus-Jhelum region in the easternmost part of the Parthian empire which lasted until 222 A.D., we may suppose that the definite place-name Kalamina<sup>21</sup> or one of its other forms was obtained by the Church of Edessa in or shortly after 232-3 A.D., when the bones of St. Thomas came, as a result of Emperor Alexander Severus' letter asking for the relics, to the "Princes of India" (as the Latin *Passio*, of about 500 A.D. definitely informs us). Several princes of Parthian India had to be addressed probably because Edessa could not tell Severus which particular king of that easternmost part of the then recently (in 222 A.D.) ended Parthian empire had St. Thomas' tomb in his territory. The decade A.D. 222 to 232-3 must naturally have been a nebulous transition period, only very vaguely known to Edessa (called "Edessa of the Parthians" in olden times), situated far away in the N.W. corner of that Empire.

We may suppose that it was a Greek form of the Indian name (perhaps Kalawan) that was taken to Edessa by Severus's agent (named Khabin in some records). For Dr. William S. Haas of the Iranian Institute and School for Asiatic studies in New York since 1943, says (in his book *Iran*, N.Y., 1946, p. 17), of the Parthian empire (248 B.C. to 222 A.D.) that "The court and the upper classes were deeply imbued with Greek culture, and the fact that the inscriptions on the Parthian coins" (even in N.W. India) "are Greek<sup>22</sup> is in itself sufficient proof of the Greek influences", and we may add: even in "Edessa of the Parthians".<sup>23</sup>

Kallin-mel-nintu (കല്ലിന്റെ മേൽ നിൽക്കുന്നു) meaning from the top of the stone, in Malayalam.

21. We recall that in about 500 A.D. the author of the *Passio* mentioned the definite place-name Eliophorum, though not Calamina. See notes 2 and 19.

After 394 A.D. a lady pilgrim Etheria or Egeria from Spain, St. Isidore's land (636), visited the large and handsome church of new design, and the martyrdom of St. Thomas at Edessa and read there portions of the (Greek) *Acts* of the saint. Did Etheria hear the name Calamina while there, and take it to Spain? "Large colonies of Eastern Christians existed in Gaul (North of Spain) from the early ages down to the times of Gregory of Tours" in France, d. 593-4. See Madlycott's *Thomas*, 1905, pp. 108, 247. Did the name Calamina reach Gaul, Tours, Vienna, Lyons, etc., in France through those colonists?

22. Coins of Gudaphara and other Indo-Parthian kings also have legends in Kharoshi script, derived from Aramaic Syriac. An Aramaic inscription in Aramaic script was discovered in Taxila, the capital of Parthian India. Another was discovered at Laghman once the westernmost limit of India.

23. Dr. F. C. Burkitt, of Cambridge, says in his article St. Thomas, in *Ency. Brit.*, 1946, and in a previous edition that the tradition (recorded by

## III. CALAMINA MISPLACED

Without knowing that Calamina was in the 7th century (or earlier, or later ?) definitely specified by St. Isidore (or a pseudo-Isidore ?) as a town situated in *Parthian* India, several disinterested authors like W. R. Philips (1903), and others with vested interests, or a strong belief, like some South Indian authors whose tradition has located the St. Thomas tomb in Mylapore, whither they and their ancestors since some past unascertained period (before or after 1293) have been going on pilgrimage (like the Christians and Muslims of 1293 A.D. mentioned by Marco Polo in his Book III, ch. 18), have attempted to identify Calamina, or to establish that it is Mylapore itself, or one of the two Mounts near it, or some other locality or region (Coromandel) related to Mylapore.

The list below presents only a few specimens of the ingenious identifications and interpretations of Calamina.

1. Calamina is the ancient city of Mylapore submerged in the sea ; so the name has not survived. This implies that when Calamina was about to be engulfed the bones of St. Thomas were rescued and deposited in the brick-and-granite-slab tomb opened by the Portuguese in 1523.<sup>24</sup> That hypothetical removal must be

Origen in 228-31 A.D., and in the *Clementine Recognitions* of about 250) about St. Thomas' preaching in Parthia arose because Edessa was in ancient times called "Edessa of the Parthians". Why, N.W. India too was India 'of the Parthians.' Mylapore was not Parthian. In the above article Dr. Burkitt refers to an article of mine on St. Thomas in South India (1927).

24. In 1522 the Portuguese opened another St. Thomas tomb in Mylapore, and strangely enough, took out his entire "white" skeleton, which is now preserved in Goa. Col. Yule says: "The Portuguese ignored the ancient translation of the Saint's remains to Edessa, and in 1522, under the Viceroyalty of Duarte Menezes, a commission was sent to Mailapur, or San Thome as they called it, to search for the body. The narrative states circumstantially that the Apostle's bones were found, besides those of the King" (viz. the Chola King) "whom he had converted etc. The supposed relics were transferred to Goa, where they are still preserved in the Church of St. Thomas in that city. The question appears to have become" (by 1903 A.D.) "a party one among Romanists in India, in connection with other differences, and I see that the authorities now ruling the Catholics at Madras are strong in disparagement of the special sanctity of the localities, and of the whole story connecting St. Thomas with Mailapur".—*Vide Marco Polo*, Vol. II, 1903, Bk. 3, p. 358. St. Thomas' skeleton was "white", while the converted Chola King's was "black". Had black people black bones in the first century, and white people white bones? Do bones remain entire and undecayed underground for about 1500 years (from 68 or 72 A.D. to 1522)?

F. A. D'Cruz, a Catholic of Mylapore says: "Catholics who venerate

supposed to have been effected before 232-3 A.D. in which year, or shortly after it, the bones were conveyed to Edessa.

Camoens' *Lusiads*, 1572, says :

“Here rose the potent city, Meliapor  
 Naméd, in olden times rich, vast, and grand :

\*                      \*                      \*                      \*

In those past ages stood she far from shore,  
 When to declare glad tidings over the land,  
 Thomé came preaching, after he had trod  
 A thousand regions taught to know his God.”

—(Burton's translation, canto X, 109).

Ptolemy (ca. 140) mentions Maliarpha (— Mylapore) and not Kalamine. So Mylapore was in existence in 140 A.D.

“St. Thomas in the Sea” near Mylapore is an expression used by Johannes de Hese in his *Itinerary* first printed in 1499, and by an anonymous writer, probably a Flemish traveller, who visited Cochin in 1502, and Quilon in 1503, but did not go to Mylapore. But Barbosa, their contemporary, did not know of St. Thomas as in the sea<sup>25</sup> near Mylapore. The anonymous writer adds that “for a fortnight about the time of his festival” (in July)” the sea may be passed on foot” by those who visit his tomb. This “sea” was probably the very broad but shallow lake-like portion of the mouth of the Adyar River, between the Little Mount and the Sea, and only about a furlong south of the tomb. That portion is practically a gulf of the sea, and visitors from the south could probably wade across it in the rainless festival month of July. But the tomb was not, and is not, on one of the small islands in that Adyar gulf (as St. Thomas' bones had been on the Island of Chios west of Asia

the tomb are not compelled to believe in its genuineness; and they know well that it is a question of evidence and that they may be mistaken as to the fact. They regard it, in any case, in the light of a memorial, whereby the saint is remembered and honoured. If miracles are said to have occurred in connection with the reputed tomb or relics, Catholics understand again that here also it is a question of evidence, and that, if genuine, they are the result of faith excited by the memorial of the saint, whose intercession had been implored by clients for Divine interposition on their behalf”. See his *St. Thomas, the Apostle in India*, 2nd ed. 1929, pp. 112-113.

25. The Malabar Catholic Syriac Office of St. Thomas, alleged but not proved, to be of the 1st-2nd cent. says: “Holy Apostle Thomas, who established your burial place on the sea-shore, pray to the most high Lord,” ..... “And Thomas was pierced with a lance in the country of India near the sea-shore”, i.e. on one of the two inland Mounts to the S.W. of San Thome, which is “on the sea-shore”.

Minor in ca. 1144 A.D.); and it was *never* in any sea, unless we accept as true the story that the first tomb was in submerged Mylapore. See III, *supra*.

Calamina is mentioned by the author of the Italian work *Nuovo Viaggio* (pub. 1762 A.D.) as a city existing in Portuguese times (i.e. after 1498) and not as one engulfed by the sea after St. Thomas' burial there. The author says: "There was at other times a town called Calamina (which has been destroyed in the war between the French and the Portuguese), in which the Christians of the Malabar coast say that St. Thomas was martyred by the infidels. This town was built on the ruins of another called Betuma (see note 4) that is to say, the town of St. Thomas". No such Calamina is known. The author probably assumed that San Thome or some place near it was Calamina, e.g. Chinnamalai where Malabar says St. Thomas was killed by an "Emprān" Brahmin. The "Song of 1601" says so; but its existence prior to 1892 has not been proved yet. See No 11 *infra* for Galmona.

2. *Carmana*, modern Karmān in the east of Persia, was in 1903 held to be Calamina by W. R. Philipps (in the *Indian Antiquary*) "from a geographical, an ethnical, and indeed as it seems to me, from every point of view". But he was then ignorant of St. Isidore's having located it in *Parthian India* some 1300 years before.

3. *Calama* on the seaboard of Gedrosia (= Baluchistan) is Calamina, said Gutschmid. (But Sandaruk where St. Thomas landed before coming to the mouth of the Indus, may be located in Baluchistan as probably identical with the ancient Alexandria (*Alek-sunder-uk*) in that province).

4. *Kalah-elmina* (= in Syriac the port of "Kalah of Isho-Yahb, 650-60, A.D., in the vicinity of India") is Calamina, "a fictitious name", said Dr. Medlycott in 1905 in his *India and Thomas*, and asked (on p. 98), "What place is there in India, other than

Let us note that from 1293 to the 16th-17th century Mylapore and Malabar said that a Gōvi's arrow, and *not* a Brahmin priest's 'lance' caused the Apostle's death accidentally. But by a complete *volte face* they now say that an Emprān Brahmin killed him deliberately!!

According to the Office St. Thomas' tomb was on the seashore, and not in the sea, or on an island. While on the island of Chios (since about 1144) it could be said to be in the sea. While in "Ortona a Mare" (= Ortona on the sea) in Italy's eastern littoral (ever since Friday, 6th September 1258) St. Thomas has been "on the sea" and he is on the Adriatic sea there even today.

Mylapore which has ever set forth a claim to it ? ” But which year is there before 1293 A.D. in which *even* Mylapore is *definitely* recorded as having set forth a claim to the tomb ? What about Calamina definitely located in *Parthian* India, which fact Dr. Medlycot did not know, or refute. It must be noted too that he located Kalah far far away as “Qalah of the Malay Peninsula, somewhat to the north of Penang”. See his *Thomas in India*, 1905, p. 159.

5. *Cholamandalam* is Calamina, said Yule and Burnell in their *Hobson-Jobson*. Coromandel, a small village on the coast north of Madras, from which, supposedly, the Coromandel coast took its name, is Calamina, said Dr. Maclean in his *Manual of Administration of the Madras Presidency*. But Coromandel is from Chola-mandal (-am), which means the Chola King's region (= Ptolemy's *Sora*, ca. 140), and occurs as Koromandel in the ancient Pali book *Milindapanha* (= King Menander's questions), of early first century.<sup>26</sup> See *Cam. Hist. of India*, Vol. I, 1922, p. 212. Besides, the real name of the above village is Karumanal (= black sand), கருமணல்<sup>27</sup>

6. *Calamina*, a (hypothetical) ancient town at the foot of St. Thomas Mount is Calamina of the Roman Breviary, Martyrology, etc., said Rev. James Doyle in *Catholic Encyclopedia*, Vol. 3, p. 382. St. Thomas, he says, was martyred there, but buried in Mylapore (5 miles N.E. of that Mount).

7. *Kurumandala* (= the realm of the ancient Kurus, cousins of the Pandavas of the *Puranas*) is Calamina, acc. to Tod.

26. *Milinda-panha*, 359, has the following: ‘As a shipowner who has become wealthy by constantly levying freight in some seaport town, will be able to traverse the high seas, and go to Vanga or Takkola, or China, or Sovira, or Surat, or Alexandria, or the Koromandel coast, or Further India, or any other place where ships do congregate’.

27. This Karumanal (= Black Sand) is by some regarded as the Black Island on which Abbot Zadoi's “monastery of St. Thomas (in India)” was situated, in ca. 390. But that island was south of Baith Katraye, the country of the Katars, the Arabian region on the west coast of the Persian gulf, facing the islands of Bahrain. An island south of Katar, still retaining the old name, marked in maps, cannot be on the Madras coast. See Dr. A. Mingana's *Early Spread of Christianity in India*, 1926, pp. 18-21. We may note also that “India” above need not necessarily be our India. For in that century, in 345 A.D., the author of the Latin work *Itinerarium Alexandri* said that “India is a vast country, a continuation (eastwards) of Egypt and Ethiopia”. In about 360 Rufinus the Latin historian designated south Arabia as “Citerior India adherent to Ethiopia”. See this *Journal* for Aug. 1947, and Aug. 1948 for pseudo-Indias west of real India. Also April, 1950.

8. *Calur-mina*, supposed by Fr. A. Kircher, S.J. (1667 A.D.) to mean "on the stone", acc. to the *wrong* form and sense personally mentioned to him about 1664 by Fr. Peter Paul Godinho of Cochin, then in Rome, is Calamina. *Kallin-mēl*, or *Kallin-mēlē* (கல்லின் மீடல், கல்லின்மேல்) must be the correct form. Baldaeus too has given that Tamil word for 'on the stone' as the original of Calamina. See his *Description* in Ch. XX of Churchill's *Voyages*, Vol. III, 575; also *Hough's Christianity in India*, I, 39, Note 3, and my article in *Indian Antiquary*, 1924, pp. 93-7. The stone here is the miraculous stone slab cross with Pahlavi inscription dug up by the Portuguese in 1547 from St. Thomas Mount, and soon supposed to have been set up by St. Thomas, and to have been embraced by him while dying. But that stone slab is not of the first century.

9. *Callalmelmina* (= "ex rupe, ex saxe", from the rock) became Calamina, said Fra. Paulinus a S. Bartholomew in his *India Orientalis Christiana*, Rome 1794. The real word for *ex rupe* is *Kallinmelnintu* (கல்லின்மேல் நின்றது). In the same book he had said that *Malanina* (= "ex monte", from the mountain) became Calamina. See *ibid* pp. 134-5. The real word is *malaiyilnintu* (மலையிலிருந்து). The Friar has also thrown out this challenge: "And let those who deny the derivation of Calamina from this Indian word, show us in India, Persia or Syria the town of Calamina".

Fra. Paulinus could with more show of reason suggest that Calamina is a form derived from Greek *Kalamos*, or Latin *Calamus* meaning reed, which he could identify with the Coromandel reed *cholam* (சோளம், found in *Cholamandalam*=the reed-realm). It is *Sorghum vulgare* of the botanists. There are indeed the Greek derivatives *Kalaminos*, *Kalamine*, and *Kalaminon* in the three genders. In Latin we have *Calamina* as in "Calaminæ insulæ", floating islands in Lydia mentioned by Pliny. Or, he could, pedantically, derive Calamina from the Sanskrit word *kālamīnam* (காலமீனம்) for a field of *kalamā*, a species of rice plant, and assume that such rice was plentiful in Mylapore in the first century.

a

10. *Kalā min* (= the fish called *Kṣṣā* or *Kalavā* (கலா, கலா) sold at Mylapore in the first century or later gave rise to the name Calamina. Fine speculation! One author has suggested *Kalā-mīn-ūr* (கலாமீனூர்), the kala-fish-village as the original of Calamina.

11. *Galmona* (= *Galma-ona* = a rocky hillock, in Syriac) became Calamina said Fr. Stephen in 1906, and in 1916 Fr. Bernard



the reputed Church historian of Malabar repeated it in his *History* of the St. Thomas Christians, in Malayalam. But no Syriac document of considerable antiquity appears to have employed that name for Mylapore, or the Little mount.<sup>28</sup>

Besides it implies that St. Thomas was buried on the Little Mount, which is against the best approved version of the Malabar tradition found in the Malayalam "Song of 1601 A.D." by one Thomas (a Rampān?) of Travancore, 48th in descent from the Rampān (= monk) Thomas II, a direct Travancore disciple of St. Thomas, who (the disciple) is alleged to have finished in 72 A.D. a (Tamil) "*Charitam*" (= History) of St. Thomas. Thomas' Song of 1601 is alleged by the bard himself to be a summary of that *Charitam*. But neither the *Song* nor the *Charitam* has yet been proved to be genuine or authentic, although an Italian translation of the *Song*<sup>29</sup> was published in Rome in 1938.

28. In 1652 Patriarch Ahattalla wrote from the east coast of India a Syriac letter to the St. Thomas Christians of Malabar, which said: "Those (= the Portuguese) whose custom it is to perturb the upright" (= orthodox?) "have detained me in custody in Calamina". Assemani (*Bibl. Ori.* III, pars. 2, p. 461) says the letter was written from Mylapore. . . . "It could be that there was a place near Mylapore called *Calamina*, or Mylapore itself was known by that name. It could also be that this was only the view of Ahattalla or of those from whom he accepted it", adds Fr. Dr. Placid, C.D., in his *St. Thomas in South India*, Trichinopoly, 1910, p. 14.

Did Ahattalla give the name in Syriac exactly as *Calamina*? The Syriac form found in the MS. of 874 A.D. is *Kalimaiya* or *Kalimiya* (with *ya*) as in this article; and that of Bar-Hebraeus is *Kalamina* in the Latin and English translations. *Calamina* was St. Isidore's Latin form; and *Kalamina* the Greek form. *Na* and *ya* in Syriac are almost alike in old MSS. Hence *Kalamina* could be wrongly read and copied as *Kalamiya*. Fr. Thomas Arayathināl, M.O.L. of Travancore, says "8th and 9th century MSS. are written in Estrangela characters. In that script medial *ya* and *na* are similar. The only difference is that *na*'s head tops a little higher. . . . *Na* medial is often mistaken for *ya*, and *vice-versa*". — (His letter dated 19th Aug. 1950). Sir John de Maundeville (1322-56) seems to be the only European who departs from the Latin and Greek forms and uses *Calanye* (the Syriac form with *ya* found in the MS. of 871, which could preferably be read as *Kalimaina* or *Kalimina* with *na*).

Did Ahattalla write *Galmona* (= Little Mount) in his Syriac letter, which Assemani read as *Galamona*, *Calamina*?

29. Fr. Heras, S.J., Bombay, unsuspectingly accepted the "Song of 1601" as genuine and authentic (in his *The two Apostles of India*, Trichinopoly, 1944, p. 42), except for "later legends, which evidently were not in the original" (written in the 1st cent. by Thomas Rampan II, a disciple of St. Thomas), one of these legends being the reference "to the king Chola Perumal of the Tamilnadu; it is a repetition of the story of Gondophares of *The Acts of Judas Thomas*", which story like other European historians,

## IV. PARTHIAN-INDIAN CALAMINA

Isidore and the early Greek documents cited in § II *supra* cannot be regarded as having conspired to locate St. Thomas' tomb in a part of Parthia (Persia), in which he preached, and thereby nullify Indian, Persian, Syrian, and other documents which in those days *presumably* asserted that St. Thomas was killed and buried in South India, or in Mylapore. No such documents of the first 12 centuries, i.e. prior to Bar—Hebraeus' *explicit* mention of Calamina (between 1246 and '86), and Marco Polo's *probable* reference to Mylapore (in 1293) have yet come to light.

Those that have actually been discovered do not explicitly, or probably, refer to Mylapore, or South India, or Coromandel, or Chola, or Galmona. The earliest of such documents prior to Isidore and the Greek records, viz. (a) the *Syriac Acts* (200-220), (b) Origen's tradition (228-31 A.D.), and later on, the *Clementine Recognitions* (ca. 250) assign respectively (a) India of the Kings Gundaphar and Mazdai, (b) Parthia, and (c) Parthia to St. Thomas' labours and martyrdom. And we know that in the days of St. Thomas and the Parthian Indian King Gudaphara (= Gondophares in Greek) the Panjab and neighbouring parts of N.W. India were under Parthian rule. So there is no contradiction between the documents mentioned.

Fr. H. Heras, of Bombay, therefore, assures us that "An apparent contradiction in the early writers who speak about the mission of the Apostle St. Thomas is the greatest proof of the historicity of the mission of St. Thomas in India". *Vide his Two Apostles of India*, 1944, p. 1. But relying upon the *unproved* Malayalam "*Song of 1601*" he brings St. Thomas out of Parthian India of the N.W. "in a cart or chariot" (as the *Acts* says), and describes him, *conjecturally*, as "following on the wake of his great protectors the Parthians" (of N.W. India); "and since the latter proceeded

he regards as authentic. Fr. Heras speaks of "the late Mylapore tradition", as later legend interpolated. Probably he means the tradition found recorded after the Portuguese had discovered in 1522 and 1523 *two* St. Thomas tombs and *two* sets of St. Thomas' bones (one preserved in Goa, and the other in Mylapore Cathedral—as against the third "*entire*" skull and other bones preserved then and even today in Ortona), and in 1547 the miraculous cross of St. Thomas.

Dr. J. N. Farquhar, who had from me the MS. of my English translation of the *Song of 1601*, relied upon the *Song* in his *The Apostle Thomas in South India*, Manchester, 1927, though he does not mention the *Song* or quote from it. I had informed him that it was a document of unproved genuineness and authenticity.

first very likely to Muthra, . . . . and then to Malwa and Saurāṣṭra (Kathiawar), and finally to Konkan, Thomas followed them" . . . . Thence he came by ship to Malabar via Socotra, says Fr. Heras.—*Op. cit.* p. 39. He, however, makes no mention at all of St. Isidore's statement of about 630 A.D. to the effect that the Apostle was buried in the town Calamina of India in the easternmost part of Parthia. Dr. Farquhar too (1927) is silent about St. Isidore's Calamina in *Parthian* India and the Apostle's burial there. (*De Ortu* in which Calamina occurs is a genuine work of St. Isidore of Seville, acc. to Steidle, O.S.B., *Patrologia, Triburgii*, 1937. But *Ency. Brit.*, 1946, says it is "of doubtful authenticity." See note 8.)

### V. CALAMINAS A GALORE

Since the earliest known St. Thomas documents of the period from the *Acts* of 200-220 A.D. to Eusebius (325) say, diversely as it were, that the Apostle preached and died and was buried in "India" or in "Parthia", those who believe that he lies buried in Mylapore identify Calamina with that locality or some place near it, while those (like W. R. Philips (1903), Fr. Dahlmann (1912), and others) who think that he was buried in Parthia, identify Calamina with some locality in Parthia (Persia), assuming that no part of India—(not even Parthian N.W. India)—could have a Calamina. Those who stand by Mylapore (not found mentioned as his burial place, before the 13th cent.) assume that no other part of India could have a Calamina.

If Isidore's statement that Calamina was an Indian town in the easternmost part of Parthia which had in it not only the Indus but also the Jhelum, 100 miles east of it, is ignored or rejected, and only place-names resembling Calamina are sought, the following are a few of such names:—

1. Quelimane in Central E. Africa, 17°·42 S.
2. Quilimane in E. Africa, 17°·30 S.
3. Kolomna in Moscow, Russia.
4. Calaminae floating Islands in Lydia, mentioned by Pliny.
5. Qālūminā Fort in Aleppo, in which Patriarch Macarius' son, an Archdeacon, was imprisoned when he was going from Roumania (or Rome?) to Russia.
6. Carmania in E. Persia.
7. Kholwan, modern Sulimanthiah in Persia, where during the great persecution of 448 A.D. many Christians were put to death.
8. Calamen, a river off the Persian coast of Makran, mentioned by Captain Wilford.

9. Calaminam (= place of the foreign ruler, or of the black ruler, acc. to Rev. J. W. Jarre, Catholic Chaplain at Maymyo in Burma, 1926), where, in Burma, there was a king in olden times (before the coming of the Portuguese), at whose court a certain John, a disciple of Thomas Medelias, preached the Gospel and was murdered in consequence. In 1521-23 Mylapore told the Portuguese that the king converted by St. Thomas at Mylapore, and buried near St. Thomas' tomb there was called Thomas Modeliar or Thane Mudaliar (perhaps Sanskrit Sthāni, Tamil Tāni, தீர்ணி = holder of a title. His name too was perhaps Thomas).

10. Calamina is found mentioned in a Latin (?) document quoted by the Bollandists, thus: "In East India (the feast) of Blessed Clara, a Dominican Virgin, daughter of the King of Calamina, who by her eminent virtues prepared for herself the way to Heaven." Again, "In the parts of India, St. Clara is held in such veneration that, among sixty kingdoms, there are found in one kingdom CCC (= 300) monasteries of the Sisters of the Order of Preachers which are called by the name of St. Clara." — *Acta Sanctorum*, July 3. See JPASB, XIX (1923), pp. 141-3. Where in East India, i.e. our India, or the Indian Archipelago, or Ceylon was this Calamina?

This king of Calamina in East India, mentioned by Seraphin Razzius the Dominican of unknown date may perhaps be the Christian king ruling in 1248 in "India where St. Thomas had preached", and in a kingdom surrounded by those of Saracen kings, mentioned in Prince Sempad's (the High Constable of Armenia's) letter of 1248 from Samarkand to the king of Cyprus. He must have been in N.W. India, and the Calamina was probably the same as St. Isidore's (ca. 630). St. Dominic was born in 1170. The Dominican Nun Clara, therefore, was of a period later than 1170.

Her father in Calamina (of Parthian N.W. India) could not have been of the dynasty of the "King of Columbo, (Quilon) a Christian", mentioned, and marked with a flag containing a *columba* (= dove) and a cross, in the Catalan map of 1375 A.D., as King Stephen of the same map, as he was in the south of India, with his capital perhaps at Butifilis (Mutfil of Marco Polo, Mutapalle in Telingana).

In 1237, i.e., 11 years before the Armenian High Constable's (General's) mention of the Christian king of N.W. India, Brother Philip, prior of the Dominicans in Palestine, spoke of Nestorianism as predominant in "India the Kingdom of Prester

John", and in the most distant states of the East. Was he the king of "Calamina in East India", and father of St. Clara referred to by Razzius (some time after 1170)? In that medieval period, however, there were several *pseudo-Indias*, and rumours about Prester Johns in Armenia, Georgia, Ethiopia, and India (and perhaps elsewhere too).

11. Karamana, a Brahmin village in Trivandrum, Travancore, South India.

12. Kalah, Kalaw, Calais, etc. resembling the first half of Cala-mina. See § VI *infra*. Mina in Arabic means a port, or rocky place; port in Syriac; race or family in Hebrew. Mena Bazaar in N. India is a bazaar for women. Kaleh in Turkish (and Syriac?) means a fortress. Kala in Persian means a castle. Col. Yule says in *Marco Polo*, Vol. I, 1903 (p. 42 of text, note 2) that "the Eastern (word) *Kala*' (is) applied in Khorasan 'to everything.—town, village, or private residence —surrounded by a wall of earth'."

## VI. KALAH, INDIA'S END, 650 A.D.

Isho-Yahb III, the Nestorian Patriarch of Seleucia-Ctesiphon, a younger contemporary of Isidore of Spain (d. 636) specifies the limits of India as follows in a Syriac letter of his written between 650 and 660 to Mar Simeon, Metropolitan of Riwardashir, the metropolis of the province of Fars in S.W. Persia, and situated N.W. of modern Bushire on the river Tāb. Iso-Yahb was a contemporary of Harsha (d. ca. 646), and of Hiuen Tsang who left India in 643.

"As far as your district is concerned, from the time you showed recalcitrance against ecclesiastical canons, the episcopal succession has been interrupted in India (*hendia*) and this country has since sat in darkness, far from and the light of the divine teaching by means of rightful bishops: not only India that extends from the borders of (*Pares*) the Persian Empire,<sup>30</sup> to the country

30. Rev. Fr. Thomas Arayathināl, M.O.L., of Travancore, translates the sentence thus: "And then in your region, from the time you usurped a revolt (that is) against the ecclesiastical canons, priestly (or episcopal: *kahna*) succession was cut off from the peoples of *Hendia*, and it remained in darkness for want of the light of divine teaching (that should be) through the true bishops; not only *Hendia*, (which is) from the edges of the borders of the kingdom of *Pārēs* (*malkūth Pārēs*), (and) as far as that place which is called *Kallah*, the country extending to one thousand and two hundred parasangs, but also this very *Pārēs* of yours". (This *Pārēs* is Fars, and not the whole of Persia).

which is called Kalah, which is a distance of one thousand and two hundred parasangs, but even your own Pares" (= Fars, and not Persia as a whole).

Which India did the Patriarch mean, and which is his Kalah? And did he mean the eastern or western border of Sassanian (222-642) Persia of his days, or of more ancient Parthia? The length of "India"—("1200" parasangs = 3900 miles)—must be taken as a rough estimate of the distance covered by coasting vessels along the sea and up some rivers, and probably also distances travelled across land areas. Besides the roughness of the estimate there was on the Patriarch's part a natural temptation to exaggerate, in order to magnify the extent of the evil consequences of his subordinate Metropolitan's recalcitrance. And 1200 may well be a wrong reading of the Syriac letters for a smaller number.<sup>31</sup>

The Patriarch says further that "All these" (calamities, viz. break of episcopal succession, sitting in darkness, etc. *supra*) "have happened to the Christians in Pares (= Fars) and in the whole southern part of the world (*be kolli tainnaye de alma*)." By the whole southern part of the world he could not mean the southern parts from Spain to South China, or from South Africa to Malaya. Probably he meant the parts from Arabia to Peninsular India, or to Malaya, excluding the parts of India proper then under the new Metropolitan of India, who was not recalcitrant like the

He adds also that in West Syriac the name is Kālāh, *h* being mute in either case. *Pārēs* in Syriac denotes either Fars or the whole of Persia. *Hendia* is applied to the river Indus, or to India; *Hendo* too has the same double connotation. In a Mosul edition *Kallah* appears as *Kelah*, the change of *a* to *e* being probably due to Arabic influence in Mosul.

He points out also that though Dr. Mingana overlooked it there is the word for edges in the sentence thus:

*Hendia demin spārai tehūmē de malkūth Pārēs* = India that is from the edges of the borders of the kingdom of Persia. (*Spāra* = edge; *sparai* = edges). Edges of the borders means the extreme limits. Assemani understood them as the shores, i.e. the western sea shores of Persia, and Medlycott too calculated the distance of 1200 parasangs from Ormuz eastwards to Malaya, via the Indus estuary, and Cape Comorin, and not from the eastern border..

Smith's Syriac Dictionary says that one parasang is 3 miles, one hour's walk, sometimes 3 or 4 miles according to the nature of the ground one may walk in one hour.

31. For 1200 parasangs the printed editions of the Syriac letter have *ālēp u mātēn parsehin* = thousand and two-hundred parasangs. But as Fr. Thomas says: "The same number could be expressed in different ways, and could be read differently if written in letters", and not in words as above. And we do not know whether the Patriarch or his amanuensis wrote (in 650-60 A.D.) a smaller number, and that in Syriac letters.

Metropolitan of Fars. But we do not know the extent of the Indian regions under the former, and where his seat was. Neither is it known whether Fars's revolt was due to the appointment of the new Metropolitan, or whether the latter was stationed in India to try and get India already in revolt, back to the obedience of the Patriarch of Seleucia.

The Patriarch wrote also five letters to the bishops, the monks, and the Christians of Baith Katraye (= Katar on the east coast of Arabia), "ordering them to reject the bishops uncanonically ordained", i.e. those who will be ordained thereafter and sent to them by the disobedient, schismatic, Metropolitan Simeon, and "to appeal ultimately in all questions affecting episcopal ordinations to the Patriarchal see", i.e. to him, Isho-Yahb. The letters were intended "For the quelling of the schism that has sprung up among the East Syrian bishops of Baith Katraye, India, and Fars," says Dr. A. Mingana in his *Early Spread of Christianity in India*, 1926, p. 33. The above five letters to Katar (which had bishops even from at least 225 A.D.) indicate that it was then under the Metropolitan of Fars, who had the right to ordain bishops for it.<sup>32</sup>

In one of the five letters he warns Katar "in time, in order to avert from you the disease of lack of faith, which through the bad cause of a little while ago, affected the peoples who live beyond you" i.e. "the far off peoples on the other side of you" (as he specifies them in his previous sentence). These remote people already infected (with schism from Fars) on the other side of Katar cannot be the people of Oman (= Mazon in Persian) next below Katar, and included by the early canonists in the district of Katar as Dr. Mingana<sup>33</sup> says (on p. 23 of *op. cit.*)

They may be the Christians of India proper — (in the Indus region, or elsewhere in real India) — or the Ethiopians anciently called Indians (e.g. by Aphrahat, the Syrian, A.D. 275-345). For,

32. In 325 "John of Pares" (= Fars, and not the whole of Persia, as Dr. Mingana says) "and Great India" attended the Council of Nicea. His great India was probably at least a portion of the Fars Metropolitan Simon's "India extending as far as Kalah". The annalists Amr and Mari mention Fars Metropolitans down to the 12th century. In the time of Patriarch George (661-80), our Isho Yahb's successor, Fars ruled over all Katar. See Mingana *op. cit.*, p. 61, last para. Assemani interpreted Katar first as Socotra, and then corrected it as Bactria. See his *Bibl. Or.* III, pp. 133 and 362.

33 Dr. Mingana, however, thinks that the far off peoples are those of Oman, and that "the bad cause of a little while ago" is "the Arab invasion and the defection of many Christians of that country to the Islamic cause". (*Op. cit.*, p. 34).

(1) in 420 there was a bishopric at Ardashir Pharihd in Baluchistan, a part of India; and (2) in about 500 there was in 'Sandaruk' (in Baluchistan, as I think) "the see of St. Thomas and the catholic faith", as the Latin *Passio* (ca. 500) says; and (3) in about 525 Cosmas found or knew about multitudes of Christians (a) in "Male" (= *Malai-nāḍu* : Arabic *Mala-bār*), (b) in Kalliana (Kalyan in Bombay) with a Persian Bishop, probably sent from Seleucia by a predecessor of our Isho-Yahb III, (c) in the island of Socotra (with clergy ordained and sent from Persia, probably by the Patriarch of Seleucia<sup>34</sup> to minister to the *Greeks* — speaking Christians of the island), (d) among the Bactrians, (e) the Huns (the White Huns under Cosmas' contemporary "Gollas". — *Mihiragula* of N.W. India), (f) the Persians (probably in India, N.W.). and (g) "the rest of the Indians" (other than those in Male, Kalliana, and the White Hun empire already mentioned).

The Ethiopians (pseudo-Indians) were Christians from at least the 4th century (of Bishop Fruventius of Ethiopia *cum* Arabia). And Cosmas (ca. 525) found multitudes of Christians there "in Ethiopia, and in Axum" (its capital), "and in all the country round about" (in N.E. Africa opposite Arabia), "among the Happy Arabians" (of Arabia Felix), "who are now-a-days called Home-ritae, and all though Arabia" (including Katar which Isho-Yahb III, 125 years later, warned betimes against the schism engineered by Simeon Metropolitan of Fars).

So we may assume that there were Christians in Ethiopia and "all though Arabia" (including Katar), and also in Baluchistan and other parts of N.W. India in Mar Simeon's days (650 A.D.) as in the days of Cosmas' travels (525 A.D.). And since the coastal strip between Mar Simeon's Fars and the Indus was contiguous to Fars, we may assume that that littoral region and also India on either side of the Indus were under Simeon and his predecessors as Metropolitans of the Persian coast and N.W. India. At least Katar and other southern bishoprics of Arabia too were probably

34. Marco Polo, 1293. says of Socotra Christians, that "Their Archbishop" (styled Bishop in the next sentence) "has nothing to do with the Pope of Rome, but is subject to the great Archbishop who lives at Baidas" (= Baghdad a later seat of the Patriarch of Seleucia). "He rules over the Bishop of that Island, and over many other Bishops in those regions of the world, just as our Pope does in these" regions of the west. See *M. Polo*, Vol. II, London 1903, pp. 407 and 409. Was the seat of the Metropolitan of India in Socotra? "In the list of the Metropolitan sees of the Nestorian Church we find one called *Kotrubah*, which is supposed to stand for Socotra", as Yule says in p. 409 of *op. cit.*



left to the Fars Metropolitan's charge by the Patriarch, who had, as we may suppose, directly under him at least Socotra, Kalyan, Malabar and Ceylon (where Cosmas<sup>35</sup> mentions Persian Christian colonists with "a Presbyter appointed from Persia", presumably by the Patriarch of Seleucia, up the Tigris).

Dr. Mingana says (in his *Early spread.....in India*, 1926, p. 35) that the "Metropolitans of Riwardashir (in Fars)----had under their jurisdiction the bishoprics of North-West India and Baith Katraye" (= Katar in Arabia, opposite Fars), and that the claim of the bishops of Fars who, "Down to the time of this Timothy" (I., Patriarch, 779-823 A.D.) used to say (from which date?), "we have been evangelised by the Apostle Thomas, and we have no share with the see of Mari,"<sup>35</sup> i.e., Seleucia, "would thus contain the earliest reference to the Christians of Fars<sup>36</sup> and North-West India, calling themselves *Christians of St. Thomas*".

On page 64 of *op. cit.* Dr. Mingana says : ---"the Christians of North-West India were in very early times" (from about 410 A.D., the days of the first Archbishop of Fars, 399-410, or 415-20 ?) "under the jurisdiction of the Persian Metropolitans of Fars. This last Nestorian see is indeed very ancient.----Soon, however, the Christians of India proper increased in number to such an extent that a special Metropolitan see with some six to twelve suffragan bishops" (presumably those of the sees in Peninsular India and Ceylon and Malaya, outside the North Indian jurisdiction of the Metropolitan of Fars) "had to be created for them. This was done ..... by the Patriarch Isho-Yahb II. (A.D. 628-643); ..... in rank the Metropolitan of India took precedence of that of China, and the Metropolitan of China of that of Samarkand". (We may suppose that the territories under the Metropolitans of India and China met at Kalah in Malaya, or Kalaw in E. Burma).

35. Quoted from Barhebraeus, *Chron. Eccl.*, III, 169-171.

36. In the Syriac work *Acta Maris* of ca. 520 A.D. we find that Mari (a pupil of Addai, i.e. Thaddeus sent to Edessa by St. Thomas after the death of Jesus Christ), after having preached in the country of the Huzites (= Khuzistan, N. of the Persian Gulf) "went down" (in the first century) "to the southern countries until the odour of Thomas, the Apostle, was wafted to him; and there also he brought a great number of people to the Lord, and detained in those countries a disciple named Job, to minister to them". The odour of Thomas, probably the news of his martyrdom in India and of his preaching in Fars, was wafted to Mari probably from Fars, and not from remote N.W. India which in St. Isidore's days (ca. 630) had his burial place Calamina, long before Mylapore was mentioned in 1293 as having a saint's tomb asserted by Muslims to be a Muslim aviar's, and to be St. Thomas's by Christians.

It was only some 20 years after the appointment of the first Metropolitan of India in about 635 (between 628-643) by Isho-Yahb II, that his successor Isho Yahb III (650-660) wrote to the Fars Metropolitan chastising him for his schismatic propaganda in Fars and Katar (and in Ethiopia ?), and also in the eastern bishoprics under him in "India" from Fars to the enigmatic Kalah, while the newly appointed Metropolitan of "India" outside the Fars Metropolitans "India" had been loyal and obedient to the Patriarch-Catholicoi of Seleucia from Isho-Yahb II. Was it because some parts of India originally under Fars (since say about 410 A.D.) had been usurped and put under the new Metropolitan of India (with his seat in Kalyan, Malabar, or Ceylon, or ?) that the Fars Metropolitan grew 'recalcitrant' ? (as Isho-Yahb's letter says).

We see, therefore, that since about 635 A.D. our India was, ecclesiastically, in two parts — one under the Metropolitan of India, and the other under the Metropolitan of Fars. This is defined in the letter of Isho-Yahb III as "India that extends from the edges of the borders of the Persian Empire<sup>37</sup> to the country<sup>38</sup> which is called Kalah, which is a distance of 1200 parasangs". And since N.W. India was, as Dr. Mingana told us already (see above) under Fars, this India ending with Kalah must have included that part of upper India, and some regions contiguous to it on the east.

We know too that according to the Latin work *Itinerarium Alexandri* (345 A.D.) "India", i.e. pseudo-Indias plus India proper, was a vast country, "a continuation of Egypt and Ethiopia", which latter itself, and Arabia were lands of pseudo-Indians. See this *Journal* for August 1948, pp. 201-207 and August 1947, pp. 175-187. Besides, Abdias the Syrian, who lived in the days of our Isho-Yahb III (650-60), another Syrian, says (in about 600 A.D.) that historiographers mention *Three Indias*, viz. (1) the India that lies towards Ethiopia, i.e., South Arabia, (2) the India that lies towards the Medes, i.e., the rest of Arabia and Mesopotamia-Assyria, and (3) our real India. See this *Journal* for August 1947, p. 177.

We may, therefore, interpret Isho-Yahb's India as extending *eastwards* from Fars along the coastal region of Persia and Baluchistan, and the lower Indus region.

37. Assemani translates the original Syriac as "*a maritimis regni Persarum usque ad Colon*",

i.e. "from the shores of the kingdom of Persia even unto Colon" (Quilon, wrongly). Mingana has borders, and not shores.

38. Syriac and Arabic writers used the terms country, island, and city indiscriminately.

But since that strip of land is not "3900 miles" in length, we have to go further eastwards across upper India to the mouth of the Ganges, and even beyond to Burma, and search for Kalahs there, leaving<sup>39</sup> Malaya with its "Kalāh-bar" or "Kalah" mentioned by the Arab merchant Sulaiman in A.D. 851, and Ceylon with its Galle (resembling Kalah to some extent, on the S. W. Coast) to the Metropolitan of India (since ca. 635), the Fars Metropolitan's rival in (lower) India.

## A

In Burma we have Kalaw west of, and near, the Shan Hills. This Kalaw (about 97 degrees E.L.) is nearly 50 degrees east of the western border of Persia, or  $50 \times 69 (=3450)$  miles away in the eastern part of India proper of those days.<sup>40</sup> There is not much difference between 3900 (rough and exaggerated estimate) and 3450 miles.

## B

If we stop short near the Ganges we find Sarāi-Kālā<sup>41</sup> State in Bihar, and about 100 miles west of Calcutta. It is marked as a "proto-neolithic site" in Plate I (Map of India) at the end of *Archaeology in India*, Delhi, 1950. But it is distant (87 minus 47 =) 40 degrees only from the western border of Persia.

Proceeding no further than North Panjab we find there in Taxila and neighbourhood, (1) *Kala-wan*, an ancient site, (2) *Serai Kala*, a Railway Station (also called *Kala-ka-Serai*), (3) *Mankyāla* with ancient Buddhist monuments, south of Taxila, (4) *Kala-bagh* with a bridge, 100 miles S.W. of Taxila Railway Station, and (5) *Mian-Kala*. The coasting distance from Fars to the mouth of the Indus, and thence up that river to Taxila is about 1400 plus 700 (= 2100) miles only.

39. It is impossible to define the limits of the parts of India proper respectively under the Metropolitan of India and the Metropolitan of Fars since ca. 635 A.D.

40. See Calaminam in Burma in the list of Calaminas in article *supra*. When did Christianity first reach Burma? Rev. John Stuart speaks of "Nestorian Missionaries, who, as Cosmas in his *Christian Topography* tells us, had penetrated to Burmah and Siam even before the sixth century A.D.", i.e. one or two centuries before Isho-Yahb's mention of Kalah. See *Stewarts Nestorian Missionary Enterprise*, C.L.S., Madras, 1928, p. 306.

41. Persian *sara* means mansion. There is caravan-serai in English, from Persian *Karwan-surai*.

## D

Again in N. W. Afghanistan there is *Kala Nao*, N. E. of Herat and *Safed Koh*; as well as *Kala-t-i-Ghilzai*, N. E. of Kandahar. Are these to be ignored? Probably we may rule out *Kalat State* in Baluchistan.

## VII. KALAS IN PSEUDO-INDIAS

Now let us assume that the newly appointed Metropolitan of India (ca. 635) was given jurisdiction over all India except the upper and lower Indus regions of the St. Thomas Christians of the Parthian, Kushan, and White Hun periods (5 centuries since St. Thomas' martyrdom), leaving these two regions and Baluchistan in N. W. India to the more ancient Metropolitan of Fars. Then "India" under him may be taken as extending *westwards*, for 3900 miles or so, from the conventional eastern "borders of Persia", i.e., from the upper and lower Indus regions; and we are to look for Kalas in the Pseudo-Indias of the west, viz., in Ethiopia, and "the first and second Indias" of Abdias (ca. 600) referred to *supra*, i.e. Arabia and the regions to the north and northeast of it (excluding of course Mesopotamia and Babylonia held by the Patriarch of Seleucia himself).

The following Kalas are found in the Pseudo-Indian and some other regions:—

1. *Calah*, the ancient town in Assyria. Its present site is Nimrud, near Mosul. It was the second capital of Assyria, after Ashur and before Nineveh or Khorasabad.

2. *Calaei* islands. *The Periplus of the E. S.* says in § 34: "Sailing along the coast, which tends northward toward the entrance of the Persian Sea, there are many islands known as the Calaei, . . . . extending along the shore". These are the Daimaniyat Islands N. W. of Muscat. But the distance from the upper Indus to these islands is not even one-fourth of "1200 parasangs" (3900 miles).

3. *Coloe*. *The Periplus of the E. S.* says in § 4: "Adulis, a fair-sized village, from which there is a three days' journey to Coloe, and inland town and the first market for ivory. From that place to the city of the people called Auxumites there is a five days' journey more."

"The ruins of Coloe were found by Bent at Kohaito. It is a large flat plateau many miles in extent, high above the surrounding country (7000 feet) and thus cool and comfortable. It seems

to have been the main settlement, and Adulis the trading-post. . . . There is a fine dam. . . . of large cut stones without mortar. . . . There are numerous ruins of stone temples and dwellings; the architecture resembling that at Adulis, apparently Ptolemaic Greek. The town covered many acres. . . . The name Coloe, Glaser notes, . . . is the same as the Arabic Kala'a (which appears in the Adulis inscription of King Aizanas) . . . "or El Abraha, king of Abyssinia about 330 A.D., for a copy of which we are indebted to the *Christian Topography* of Cosmas Indicopleustes" . . . (Schoff's notes on Coloe).

4. *Galla* Country in North East Africa. in the Horn of Africa, 5 degrees N. L. and 40 degrees E. L.

5. *Kala-hari*, desert in the interior of South Africa.

6. *Quiloa* in Zanzibar, E. Africa.

7. Kalol, Bombay, 23°·15 N., 72°·33 E.

8. *Kalan-jar* in the kingdom of the Chandel kings of Bundelkhand, which locality was attacked and taken by Mahmud of Ghazni in 1023 A.D.

9. Hassan *Kalā* with its hot spring, in Armenia. See Yules's *M. Polo*, I (1903), Bk. I, Ch. 3, p. 47.

10. *Narin Kaleh*, to the west of which are the ruins of the famous Caucasian Wall that runs from the Castle of Derbend along the ridges of the Caucasus, wrongly called in the East *Sadd-i-Iskandar*, the Rampart of Alexander (the Great). Alex. Dumas, novelist, has described the ruins. See Yule, *op. cit.*, I, 4, p. 53.

11. *Kala'* Atishparastān, near Sava in Persia, about 130 miles south of the Caspian Sea. *Vide Marco Polo*, Vol. I, Bk. I, Ch. 13. The name means the *Castle* of Fire-worshippers.

12. *Pamir Kalan* — the Great Pamir, one of the several Pamir Steppes.—(*Marco Polo*, Vol. I, 1903, p. 176 of text.)

13. *Qal'ah Asgher*, with sulphurous hot springs curing itch, on the Urzū-Bāft section of the east Persian road, shortest and direct, from Ormuz to Kerman. See Yule's *M. Polo*, II (1903), p. 122, and map *op. p.* 114.

14. *Kala' Safed* = White Castle, fortress in Shūlistān province east of the Persian Gulf's northern half. See *ibid.*, p. 85, and map *op.*, p. 1.

15. *Sin Kalān* = Canton in China, so called by Ibn. Batuta. 14th cent.

16. *Kala*, i.e. Kila'-i-Gabr = Gueber-Castle is a name applied commonly to ruins in Persia. See *Marco Polo*, I, 1903, p. 82. Gueber, or Guebre is a Zoroastrian, a fire-worshipper. See 11 above. Guebre is akin to Arabic Kafir = infidel, non-Muslim. Kafir became kavyar in old Malayalam (= infidels), and kappiri (English Caffre, Kaffir), in modern Malayalam, with the sense of a native African. To Muslims all other religionists are Kafirs.

Of these 16, Coloe in Ethiopia may be Isho-Yahb's Kalah. The Fars Metropolitan's suffragan bishops would thus be located in sees scattered from the north of Indusian India downwards, and in the coastal strip from Baluchistan<sup>42</sup> to Fars, and also beyond that in Arabia and Ethiopia — all these three being pseudo-Indias in Isho-Yahb's and Abdias' days (7th century), and the Indus being the conventional old eastern boundary of Persia (Parthia as St. Isidore says, 630 A.D.).

Kalaw in *Burma*, Kalawan or one of the other Kalas in the Upper Indus region, Qala in Malaya, and Coloe in *Ethiopia* being, as shown above, Isho-Yahb's Kalah very possibly, it seems difficult to choose one of them *decidedly*.

#### VIII. PREVIOUS IDENTIFICATIONS

J. S. Assemani, Col. Yule and others who, since 1728 A.D., tried to identify Kalah of Isho-Yahb III (650-60 A.D.), or of the Arab travellers of the 8th-9th century, did not know or failed to take into consideration, the fact that since about 635 A.D. there has been a separate Metropolitan of India (as Dr. Mingana says in his *Early Spread . . . in India*, 1926, p. 64). They did not also think of *Pseudo-Indias*.

The following places have been suggested by them, and that in India proper alone.

1. Qala'-h is described by one Arab Traveller as "the focus of the trade in aloeswood, in camphor, in sandal-wood, in ivory.

42. Sandaruk where acc. to the Syriac Acts (200-220 A.D.) St. Thomas landed before reaching India of Gundaphar (= Gondophares) was probably Alek-sandaruk (= Alexandria) in Baluchistan, founded by Alexander 'the Great on his return from India, along the Baluchistan coast. In 420 A.D. there was a bishopric at Ardashir Pharihd in Baluchistan, and in ca. 500 the author of the Latin *Passio Thomae* says "there is there still the see of St. Thomas and the catholic faith". George Philip's *New Scripture Atlas*, S.P.C.K., London, Map 10, of Greek, Seleucid, and Ptolemaic Empires, has this Alexandria marked on the sea coast about 125 miles west of the widest mouth of the Indus, and the same distance from the famous Pattala of the ancients, an Indus river port.

in the lead which is called Kala-i ", and by another, Ibn Mehalhal (941 A.D.), as " the first Indian city, and the last for those sailing thence " (to China), " a great city with high walls and many gardens and water courses " . . . . . (and having) " in the vicinity . . . . . mines of lead called *qala'-i*, which is found in no other part of the world but at *Qala'-h* ". In 1845 Reinaud identified this with " the present Qualah of the Malay Peninsula, placed somewhat to the north of Penang " (as Dr. Medlycott says in his *India and Thomas*, 1905, p. 159), or with Coromandel.

In 1886 Yule (in *Hobson-Jobson*, s.v. Quilon) identified Isho-Yahb's Kalah with " the port of the Malay regions . . . . , probably ", i.e., with the above Qalah of the Arabs.

This Malayan Qalah would be the easternmost part of the India under Fars if the region of India under the contemporary Metropolitan of India did not include it. But we do not know which parts of our India proper (including Burma with its *Kalaw*, and the countries south of it as far as the tip of Malay with its *Qualah*) were under Fars, and which under the new Metropolitan. Did the Partiarh Iso-Yahb II (628-643) deprive the Metropolitan of Fars of the whole of India proper as a punishment for some fault of his ?

2. Point de *Galle* in Ceylon was suggested by Reinaud in 1848 as representing *Qala'h* of the Arab travellers.

3. J. S. Assemani in 1728 read the Syriac name Kalah in Isho-Yahb's letter (650-60 A.D.) as " Colon, Khalam (*lege*). " Gilde-meister, in 1838, pointed out that it should not be read as *Colon* (Quilon in Travancore).

4. Gidemeister, 1838, *supra*, explained it as meaning *Chola* or *Coromandel*.

5. Gabriel Ferrand identified the Arab Sulaiman's Kalah or Kalahbar (A.D. 851) with the port of *Kra* or *Karh*, on the west coast of the isthmus of that name.

6. Dr. Mingana (*Early Spread . . . . . in India*, 1926, p. 33) says : " I believe with Reinaud that the *Kalah* has a connection with Ceylon ; indeed the whole of the southeast (sic?) coast of Ceylon was formally (sic) known as Galla." (Formally should be read as formerly).

7. " Cordier is sure that it is to be identified with the modern Malacca or Singapore ", " and very possibly identical with Kadah (Quedah)". Mingana does not accept this. *Ibid.*, p. 33.

**BLOOD ON THE MOUNT** (of St. Thomas), by Fr. Louis M. Shouriah, M.A., Ph.D. (Second Edition), Good Pastor Press, Madras, 1950, 41 pages, 8 as.

As the Bangalore Bishop Rt. Rev. P. Thomas's Foreword of December 1947 says, the booklet "will prove a valuable Guide to pilgrims and visitors to the Shrine" (St. Thomas Mount Church, Madras). But as the author based his booklet "chiefly on material gleaned" from the works of D'Cruz (1928), Medlycott (1905), Richards (1908), Terence (1946), and four others (page V), who have not critically collated all the specially relevant documents beginning with Marco Polo's account (ca. 1293 A.D.) of the *Muslim and Christian* claims to one of the two "St. Thomas tombs" at Mylapore, Madras, and ending with Diogo Fernandes' sworn deposition\* of 1543 regarding his own excavation in 1523 of the St. Thomas tomb still preserved inside the Mylapore Cathedral, and also the signed "*Deed of Verification*" (dated 16th Nov. 1566) of the entire St. Thomas skull at Ortona, Italy, "*with no part missing*", there is in the brochure no real puzzling out of the St. Thomas problem.

For instance the following five riddles still remain unsolved : (1) whether St. Thomas had really been buried in *one or both* of the Mylapore tombs which were opened in 1522 and 1523, and which yielded two *complete* St. Thomas skeletons venerated to this day in Goa and Mylapore since those two years, (2) whether these two and the complete Ortona skull and other bones, and his three tombs (2 in Mylapore and 1 in Calamina in *Parthian* India according to St. Isidore, d. 636 A.D.), as well as his two mummified bodies of 1122 and 1370 in Syria, and his arm and finger in Italy, put together will make *only one skeleton, one tomb, and one body*, (3) whether he had first been killed *accidentally* by a Mylapore *Pariah* with an *arrow* as Mylapore and Malabar *Christians* (and *not* the Muslims) affirmed from at least Marco Polo's time (1288-93) to Diogo's (1517-43), and was then *deliberately* murdered again by a Mylapore '*Emprān*' *Brahmin* with a *śūlam* (= lance) as all South Indian Christians have been religiously contending since ca. 1543 to this very day, (what bare-faced self-contradiction !!), (4) whether he died "84 minutes before sunset on 3rd Karkadagam 72 A.D." as the alleged St. Thomas "*Caritam*" of 1st century, and its alleged summary the Malayalam "Song of 1601" assure us, or (on 21st December) "68 A.D." as the Mylapore Latin inscription affirms, and (5) whether the above *Caritam*



did exist at any time anywhere, and the Song of 1601 had its existence before 1890 A.D. No tradition or document unconnected with South India says St. Thomas died accidentally at the hands of a Pariah fowler with an arrow. (*Caritam* = history).

Fr. Shouriah and his authorities are innocent of the latest interpretation of the Mount Cross Pahlavi inscription by Prof. Winckworth (1928) as slightly revised (1948) by Prof. Henning. *Vide this Journal* (J.I.H., Dec., 1948, pp. 318-19). How could that cross set up, or arranged by (the Persian) Afras (in the Sassanian period, i.e. some time after 222 A.D.) be held to have been "carved by St. Thomas himself, and embraced by him while dying, pierced by a Brahmin" (p. 19) ?

—T. K. JOSEPH



## A Travancore Inscription in Greek Script

BY

T. K. JOSEPH

*Trivandrum*

Some 25 years ago, on 14-12-1923, I received for decipherment a graphite rubbing (see fascimile) of an embossed inscription on one of the bells in the Catholic church at Kuravallangād in North Travancore. (Each letter is about 1 inch in height.) As the epigraph was in no script (Vaṭṭeṭuttu, Pahlavi, Hebrew, Kufic, Syriac, Arabic, Latin, &c.) previously found in Malabar inscriptions, I sent copies of it to several experts in India and Europe, and published its fascimile, with notes, in *The Young Men of India* (Calcutta, May and June, 1926), *The Indian Antiquary* (London, July, 1927), &c.

The following are some of the opinions expressed by experts in their letters to me.

1. *Rev. Fr. H. Heras, S. J., Bombay*: "All the types of the inscription are Greek types. As regards the reading, the difficulty is greater, for it seems that all are abbreviations, viz., the first letter only of each word was used.... It seems to be a religious invocation."—(His reply dated 17th August, 1925).

2. *Sir John Marshall, Simla*: "All I can tell from the eye copy is that the inscription is not Greek"—(Reply dated 5th August, 1925. He means that the words are not Greek).

3. *Ernst Herzfeld, Germany*: "The bell inscription is a great puzzle.... At first, one ought to know everything about the bell itself, to get an idea of its general period and style of art. The inscription itself is so ambiguous, θ is a letter which looks Greek, and one is inclined to read θΕΘΕ as theos, "God". But it seems impossible, because other letters, like G, V, P, S are distinctly un-Greek. So, the greatest probability is that the language might be old-fashioned Portuguese.... It seems that the inscription is full of abbreviations, and that some letters stand for whole words.

There is the famous inscription on bells: *Mortuus plango*, &c., but no similarity with the existing letters.

It might be, on the other hand, the signature of the master, or a date."—(15th September, 1925).

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4. *John Van Manen, London* : "It may well be that it represents nothing more than the barbaric result of an attempt to reproduce something like TE DEUM LAUS. ANNO. MDL, in which the year number is the most unsatisfactory part."—(17th June, 1926).

5. *Sir J. J. Modi, Bombay* : It is not Pahlavi.

6. *Dr. Zwemer, Cairo* : It is not Kufic.

The characters are evidently European as we may infer from the opinions of the first four authorities cited above. Since the letters were made of wax threads, and pressed on to the original wax bell before casting, there must be deformities in them. It is possible also that the ignorant bell-founder misplaced the letters, or even inverted them in the process of sticking them on to the wax bell, and the educated priest or layman who had fashioned the wax letters and arranged them on a strip of palm-leaf, paper, or board in the proper order was absent while the bell-founder was putting them on to the wax bell.

The inscription remained enigmatic until 30th May, 1948, on which date Rev. Fr. Joseph Ēṇēkkād of Travancore, published in a Malayalam article in the *Deepika Weekly* (of Kottayam in Travancore), p. 12, his family tradition to the effect that one of the bells in the Kuruvalangād church was presented by his ancestors, and that the name—

"Vattakkantam (Nellittānam) Kōramman" (— the man Kōramman of the place called Vattakkantam, or Nellittanam)

was on the bell. With that clue I began at once to puzzle out the inscription, and found that it began with—

NEliuN + eT-h e

in Greek characters (capital and small mingled), although the first N, which is capital Nu, and capital Theta (T-h) before the last e have been turned by the founder thus :—

N turned into  (Greek capital N is the same as English N)

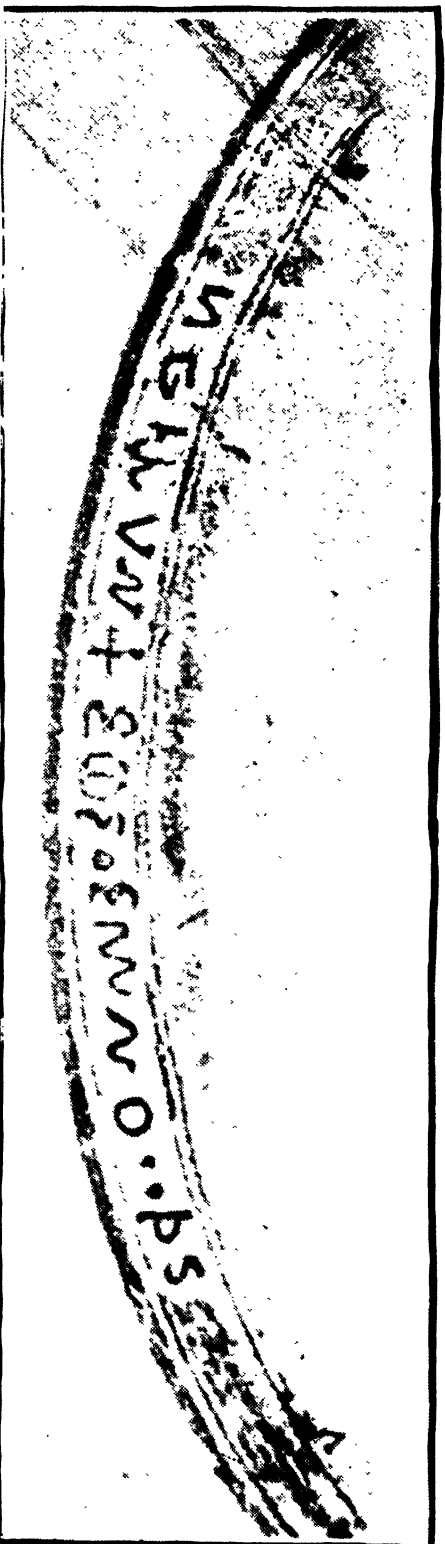
θ turned into ⊕ (Theta is a circle with a horizontal diameter).

The middle bar of capital *Epsilon* (E) has dropped to the tip of the bottom bar. *Upsilon* before the second N is like English V, and therefore not quite similar to small *Upsilon*. It may, therefore, be regarded as inverted capital *Alpha*, A with the wax cross-bar lost in manipulation. Capital Greek *Alpha* is the same as English A.

Thus we get —

NEliAN + eT-h e





Scale one-fifth.

T. K. JOSEPH

NE λϰτΑΝ† εΘεο εμ Νο. .Ps  
K  
α

(Correct forms of the Greek letters)

The small letters *Lambda* and *Iota* stick to each other, and there seems to be a small *Tau* (English t) also in the medley. So we finally have —

NElitAN + eT-h e (Greek NEλ ι τ Α Ν ε θ ε)

which is the locative form of the Malayalam place-name Nellittānam found in the tradition. The cross in the name is an intruder from the second name Kōramman, as we shall see presently.

That name is a corrupt form of —

Kōra Tomman

[--*Koresh* (Persian *Cyrus*) *Thomas*, or (Dios-)corus *Thomas*], and the Greek letters—

o e m N o . . P s

form part of Kōra Tomman in Greek script, irregularly. K is missing as it has been refashioned by the bell-founder into a cross, and misplaced in the first word after the wax K had been accidentally broken into its three components thus :

| - - (made into +)

The two dots after No are the two feet of Greek *Omega* (Ω) detached from its arch-like body, which was converted into a small circle and placed before e.

It can legitimately be inferred that the strip of palm-leaf, paper, or board on which the Greek-knowing man arranged the wax letters in the proper order, was accidentally upset, and several of them dropped to the ground or got dismembered, and there was no time to wait for the learned transliterator's return. Had the epigraph been in Syriac (as in the case of the Syriac bell inscription<sup>1</sup> of 1584 A.D. in the same church) there would have been no such confusion, as priests and others versed in Syriac were not very rare in those days.

The existing letters of the second part, rearranged, with K (the cross) recovered from the first part, will give us —

KOPsomeN (Greek K Ω P σ ο μ ε Ν)

in which P is not English P, but Greek capital *Rho*, with the sound of R. So

KOPsomeN is

KORsomeN, a shortened form of

1. An English translation of the Syriac inscription of 1584 was published by me in June, 1926.

K O R a s o m e N, which stands for

K Ō R a t o m e N, t being converted into s, as in certain instances like —

1. Mutaliār — Musaliār (a title)
2. Patavāram — Pasāram (= tithe)
3. Thalab-Misri (Arabic) — Sālā-  
— Misri (= Salep of Misr = Egypt)
4. Mūttatu — Mūssatu (a caste)
5. Taṭattam — Taṭassam (= hindrance)
6. Varkkattu (Arabic) — Varggissu (= circumcision).

We cannot guess why Greek capitals (uncials) are interspersed with small letters, or why Greek *s* (*Sigma*) usually placed only at the end of a word appears in the middle, where usually another form of *Sigma* is employed. It may be that the author of the inscription wanted to indicate that *s* is a purposely altered form of *t* occurring in *tomen* (— Tomman, Thomas).

It may be supposed that the shortened form *Kōrsomen*, with *s* replacing the legitimate *t*, was used by the author of the inscription on purpose to indicate its date. According to the Malabar system employed in chronograms —

Kōr-so-men = 571

of one of the following eras current in Travancore :—

1. A.D. 571 (impossible, because A.D. was introduced into Travancore by the Portuguese in the 16th century only).
2. A.D. 1571 (possible; another bell in the church is of 1584).
3. Kali 3571 (= A.D. 469).
4. Kali 4571 (= A.D. 1469).
5. Quilon Era 571 (= A.D. 1395).
6. Jewish Era 4571 (= A.D. 810).
7. Jewish Era 5571 (= A.D. 1810).
8. Greek Era 571 (= A.D. 260).
9. Greek Era 1571 (= A.D. 1260).

The Pudu-Vaippu, Thali, Iravipuram, Parasuramic, Saptarshi, and other eras found used in Travancore and Cochin inscriptions and other records are left out of consideration in this connection. Tradition does not mention the date of the bell, and palaeography<sup>2</sup> seems to give some indication of age. According to

2. Small Epsilon  $\epsilon$  occurs thrice in the inscription. Is its form ancient or modern? It seems to be modern, perhaps of 1571 A.D.

*The Catholic Directory*, Madras, 1924, the Kuravalangad church dates from 335 A.D. But Fr. Bernard assigns it to the 4th or the beginning of the 5th century, in his *History* (of the St. Thomas Christians, Malayalam, Vol. I, 1916, p. 309). But neither author cites authority. Probably both rely on mere tradition.<sup>3</sup>

It is Theta and Omega that characterise the script as Greek. About 1183 B.C., during the Trojan war, Palamedes introduced Theta, and Simonides Omega into Greek. *Vide* Dr. David Diringer's *The Alphabet*, p. 455 (Philosophical Library, N. Y., 1948).

The earliest known (9th-6th cent. B.C.) form of Theta is a circle with both a horizontal and a vertical diameter, or with a dot alone in the centre; and that of Omega too is a circle with a dot in the centre. A circle with a vertical diameter, as in our embossed inscription, was Psi in the 7th cent. B.C. See plates in *ibid.* pp. 457, 454, 450.'

The earliest (9th -7th cent. B.C.) uncial Epsilon was E-shaped, angular, like the modern one. From the 4th-9th cent. A.D., and later too, we find uncial Epsilons similar to the one in our inscription, i.e., with no angularities. But that fact alone cannot carry the inscription back to one of those centuries. It (C-like Epsilon) can very well be one of the two very late (12th-14th cent., and later) forms of cursive or miniscule Epsilon, magnified, or writ large. The other form (ε) of small Epsilon appears in our inscription thrice. That form dates from at least the 2nd cent. A.D., and survives in *modern* current hand as well as in print. There is therefore no reason for regarding our inscription as *decidedly* ancient.

There is a fountain at Kuravalangād, called Younākkulī, which name is usually interpreted as Jonah's Pool. Though there is the annual Jonah's festival in the church, the name may be interpreted as Yavanā-kkuli, i.e., the Greek's (Ionian's) Pool.<sup>4</sup>

Fra. Paulinus (18th cent.) says: — — — "and *Muttiera* and *Corolongatta*, where there are two considerable congregations of the Christians of St. Thomas. At the latter place they have a very beautiful church dedicated to St. Mary, in which the service

3. One may entertain the hope that no tradition will hereafter arise to the effect that the church was built in 571 of the Greek Era, i.e., in 260 A.D. *Vide*, No. 8 in the above list of arbitrarily assumed dates.

4. In Malabar Syrian Christian parlance Greek is 'Yavanāya bhāsha', and the Greek Church is 'Yavanāya Sabha'. Yavanāya came into Malayalam from Syriac. The Latinite Malabar Christians use the word Greek itself in its Latin form *Græcus* corrupted into 'Grēkku'.



is performed by priests who are natives of the country. The Nestorians<sup>5</sup> had formerly a monastery here, inhabited by people of their order from Persia and Chaldea, who were the spiritual guides of the Christians of St. Thomas. There were monasteries also of the like [p. 124] kind at Edapalli, Angamali," (both in North Travancore) "and at Mailapuri" (Mylapore) "on the coast of Coromandel; but they all fell into decline after the Portuguese had established themselves on the coast of Malabar."—(*A Voyage to the East Indies, 1776 to 1789*, London, MDCCC, pp. 123, 124). Some of the Nestorian monks in the above four Travancore monasteries, not far from one another, may have been versed in Greek in addition to Syriac and Persian or Pahlavi. The representation of double ll, tt, and mm of the two Malayalam words Nellittānathu and (Kōra) Tomman in the inscription<sup>6</sup> by single l, t, and m suggests that the transliterator was a foreigner—European, or West Asiatic.

5. Bp. Medlycott says: "By the year 530" (Cosmas' days) "the Christians in Male, Malabar, had been captured in the Nestorian net."—(*India and...Thomas*, 1905, p. 199, note 1). "There can be little doubt" says Dr. Burkitt, Cambridge, in his letter to me dated 14th Feb. 1927, "that there was a time (say 9th or 10th century) when the Nestorian fully-developed rite was observed by the Christians of South India." The Malabar Liturgy which Menezes ordered to be "corrected" or "purged of certain errors" was the Liturgy of Addai and Mari, says Dom Conolly.

6. Some dated Travancore bell inscriptions:

1. Syriac inscription of 1584 A.D., June (Kuravalangad).
2. Portuguese inscription of 1647 (Kadutturutti).
3. Vaṭṭeluttu .. of 1606 March (Mailakkompu). (Fr. Bernard wrongly read it as 686).
4. Do. .. of 768 Q.E. (1592 A.D., Mānmalasséri). (Deciphered by me on 5-2-1949).

## Christian and Non-Christian Crosses in Ancient India

BY

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### I. MOUNT CROSS, MADRAS (FIGURE ON P. 122)

Crosses of the pre-Christian and Christian periods have been discovered in India, the most famous of them being the Pahlavi-inscribed miraculous stone cross, wrongly called "St. Thomas Cross", accidentally dug up by the Portuguese in 1547 A.D. from St. Thômas Mount, Madras, and now preserved over the main altar in the Church on that Mount. After its discovery and attribution to St. Thomas it is said that occasionally, since 1557, it began to sweat and bleed miraculously. So many copies of that sweating, bleeding cross were (as Gouvea says in his *Jornada*, 1606, fol. 60 v, col. 1) made by Christians in Malabar (and perhaps in other parts of India and in Ceylon), and set up in their churches and greatly venerated. Some of those copies with or without a clumsy, unintelligent, reproduction of the original Pahlavi inscription, have been discovered in Travancore, but not in other parts of Malabar, the best known of such inscribed copies being the two in the Valiya Palli Church at Kottayam in North Central Travancore.<sup>1</sup> No such imitation crosses, with or without the Pahlavi inscription, have yet been discovered in localities south of Kottayam or North of Ālangād in North Travancore. Copies discovered in other parts of India too are not known. The Ālangād copy has no inscription. Why the known copies of the miraculous Mount Cross are confined to the Kottayam—Ālangād portion of Travancore has yet to be explained. (The older Kottayam cross is said to have been brought from Cranganore).

1. For details about the original cross and its copies, and about the several interpretations of the Pahlavi inscription see the present writer's *Malabar Christians and Their Ancient Documents*, 1929. The latest interpretation of the Pahlavi inscription by Dr. W. H. Henning of Cambridge, kindly supplied to me in his letter dated Cambridge, 6th September 1948, received by air on the 13th of that month runs: "My Lord Christ, have mercy upon Afras, son of Chaharbukht, son of Gaurgis, who set this up." See this *Journal* for December 1948, pp. 218-19.

Since the inscription is held to be in "Sassanian Pahlavi", the Mount Cross is usually assigned to the Sassanian period of Persian history, viz. A.D. 226 to 651. But later Pahlavi inscriptions are found in West India, e.g. on the Travancore Sthāṇu Ravi copper-plate of about 873 A.D. belonging to the Quilon 'Tarisā' (= Christian) church built about 825 A.D. by the Persian merchant Maruvān Sabr-Īsō, described in the document as he "who founded this city and obtained possession of it." This was in fact a *rebuilding* of the city after its destruction,<sup>2</sup> two or three years before. ~~Two~~ later Indian Pahlavi inscriptions also are known, viz., those of 10th October, and 24th November 1009, and that of 30th October, 1021, scribbled in the Kanheri caves in Bombay by Parsi visitors. The Mount Cross and its Pahlavi inscription may therefore be even of a year subsequent to the Sassanian period, A.D. 226-651.

## II. A ST. THOMAS CROSS IN CRANGANORE, COCHIN

In his *Jornada* (Coimbra, 1606), fol. 53 r-v, Gouvea describes another so-called St. Thomas Cross thus :—

"Cranganore was anciently a very noble city of the Christians of St. Thomas, where many lived, and very rich ones<sup>3</sup> and where

2. This is referred to as "Kollam alintu", கல்லம் அலிந்து, i.e. Quilon was ruined, in the Tamil work 'Maturaittala Varalāru' (No. 27 of the Chentamil Series). "Kollam alintu 501-ām antu" is the phrase there, which means the 501st year after Quilon was ruined, and it is mentioned as corresponding to the Saka year 1246.

One version of the Malabar Hindu account called Keralolppetti (— origin of Kerala) printed in 1086 M.E. mentions on p. 35 the digging of a *cira*, i.e., a tank (in Quilon) by the kings of Kerala and "the Quilon merchant" in 1 M.E. (824-5 A.D.). This was probably the deepening of the Quilon harbour by the Persian merchant Sabr-Iso of the copper-plate, in that year. In later inscriptions and other records Quilon is designated "Kurakkēni-Quilon", to distinguish it from other ancient Quilons in Kerala. The name means Quilon having 'Kural-kēni', குரல் கேணி, a tank with a *kural*, a ~~neck~~, i.e., a ship-channel leading into the kēni (— tank), viz., the deepened part of the harbour.

3. E.g. (1) Thomas Knāy (— the rich man Thomas, in Syriac) who founded in Cranganore the city called in Tamil Makōtai, in about 700 A.D. Makōtai may be the Tamilised form of Syriac *Mahoza*, meaning a city, and there were in Iraq two or three ancient cities called Mahoza or Mahuza. (2) "Iravi Korttan of the City of Makōtaiyar" (— of the (Chera) king, or of the people of Makōtai), who in 1320 A.D. was granted by the king the status and title of Manigramam, i.e. the chief of the merchant guild called Manigramam, correctly Vanik-grāmam in Sanskrit, meaning the village or corporation of merchants. (3) In about 400 A.D. a Greek scholar came and lived in Cranganore for six years, studying its soil, climate, etc., and learned its language, Tamil. See this *Journal* for April 1950, pp. 5-6.

at first they began to have communication with the Portuguese, when presently they came to India. And the Church which exists today" (about 1600 A.D.) "in the fortress is the same which the Christians had anciently" (from the year 50 or 52, &c., A.D. as some say, in which St. Thomas is said to have built it, and erected a cross there). "Wherefore, they have much affection and devotion for it, and also to a cross which is in the same City, which they call the Cross of the Christians, having for tradition that Saint Thomas placed it there and made many miracles, not only for the faithful, but also for the infidels, God wishing the sign of his holy cross to be honoured and venerated by all. The cross is placed in the middle of a chapel, open on one side, and entirely shut off with a grating: and it gives so much devotion to all who with true faith prostrate themselves before it, that there is no person who feels not in its presence newness of spirit and compunction of heart. "On arriving in the morning, and after having been taken in procession to the Church, where he prayed to the most blessed Sacrament, the Archbishop" (Dom Frey Aleixo de Menezes) "went to this Cross to say Mass. This Cross has sometimes been raised in the air, so high that it almost disappeared [Folio 53 v, col. 1] from the eyes of the beholders; and so full of splendour that it blinded the eyes of those who looked on it. The Gentios have so much veneration for it that they make to it many vows and offerings in their illness or needs, or when they have lost things which they value; and they send oil and wax to light it up, and they say presently that they obtain favours and find what they have lost; and, not long before the Archbishop arrived there, the old king of Cranganore, having lost something which he much liked, sent oil to the cross, and found it presently. Which he attributed to the Cross of the Christians. And, though many Gentios receive daily remedy in their wants, in this divine sign, they do not lay hold of its chief fruit, which is their salvation." — *Jornada*, fol. 53 r-v.

It is likely that this "St. Thomas Cross" was an original Persian or Iraqi Cross (with or without inscription?) like the original Persian cross on St. Thomas Mount, and not one of the numerous copies of it made and set up in Malabar in or after 1551, in which it was solemnly set up in the Mount Church under the notion that it was the cross which St. Thomas had erected, and embraced at the point of death.

Gouvea informs us (*ibid.* fol. 60 v., col. 1) that "all the ancient churches" (of Malabar were) "full. all of them, of Crosses after the manner of the cross of the Miracle of Saint Thomas, which

they call Saint 'Thomas' Cross ; " \* \* \* " And for this Cross it is to be noted that all those which are found in " (the chancels of ?) " the Churches of St. Thomas, ancient ones, or carved on stones, or in the very ancient buildings themselves " (the naves, or out-houses ?) " of the same Churches, are of this shape and made in this form, of the one that sweats " (fol. 79 r, col. 1), since 1557 A.D. in the St. Thomas Mount Church.

And St. Thomas, unlike any other Apostle, or Christian of the first centuries, is said to have set up seven crosses in or outside seven of the 7½ churches built by him in Malabar, the half-church being the crossless one at Thiruvamcode in South Travancore.<sup>4</sup> But according to the *Ency. Brit.*, s.v. Chalice, <sup>Drinking vessels</sup> the earliest known Christian symbol is the chalice, the sacramental wine cup sanctioned by Jesus.

4. There is, however, no documentary, or archaeological evidence prior to the 13th century for St. Thomas' sojourn and martyrdom in South India. In 1293 A.D. there was a tomb in Mylapore, Madras, which Muslims claimed as that of a Saracen 'a'varian' (= holy man : from Arabic *hawārīy* : Tamil suffix *ān*) come from Nubia (in or after the 7th century A.D., of the Prophet Muhammad), while the Mylapore Christians claimed it at the same time as St. Thomas', adding (quite contrary to all other extant St. Thomas documents from the Syriac *Acts* of 200-220 A.D. downwards) that he was killed (not deliberately as a martyr but) accidentally by a Govi (= Pariah) fowler with an arrow aimed by mistake, as Marco Polo tells us in his *Travels*. Vol. II. Bk. III, Ch. 18. His. Ch. 17 adds that the Govis of those days (1293) admitted that it was one of their ancestors that had killed the holy man buried inside the tomb.

Moreover, when in 1523 the Portuguese opened from outside the brick and-granite-slab-tomb, partly outside and partly inside a Church, they found it quite intact, about 9 feet below ground, and took out from its outer and inner portions what remained (after several centuries of decay) of 'the skull, ribs, body-bones, thighbone', etc., of the holy man. These could not be St. Thomas', as his *entire* skull and other bones famous in the West from at least 232-3 A.D. were preserved and exhibited at Ortona in Italy in and before that very year 1523, and are now wanted back by Malabar, ignoring or repudiating the bones of 1523 kept in Mylapore, and not sent or taken to Ortona at all. The same person could not die in two entirely different circumstances, or have two skulls and other bones.

In addition to the above repudiation now (and also since some time after 1601 A.D.) of the Mylapore bones, there was, since about 1520, a complete *volte face* by which both Mylapore and Malabar repudiated the age-long (from at least 1293 to ca. 1520) account of St. Thomas' (really the Muslim avarian's) accidental death (not as a martyr) at the hands of a Govi, and substituted the account of deliberate murder as a martyr. The latest of the diverse forms of this account, since 16th century, affirms that St. Thomas was killed by an Emprān Brahmin priest with a lance or spear. The only document anterior to the 16th century which brings in a priest in utter disregard of the soldiers, <sup>Drinking vessels</sup> coming of non-Indian documents of A.D. 200 down-

## III. KING PALLIVANAVAR'S 6 CROSSES, TRAVANCORE, 317 A.D.

Almost all versions of the Hindu account of ancient Malabar called *Kēraḷōlpatti* mention that a Chera king of Cranganore whose designation Palli-vāṇavar (—he who resided in, or ruled over, a Palli, a *non-Hindu* place of worship) is variously given as Paḷli-vāṇar, Paḷli-māṇar, Vāṇa Perumāl, Bāṇa Perumāl, Bāṇa Varman, etc., and whose proper name seems to have been Neelan (—Siva), created a sensation among the Kerala Brahmins by his conversion to Buddhism. See Logan's *Malabar Manual*, *Malabar Gazetteer*, and other authorities for the above details, and for the division of his kingdom among his under-kings, his retirement to another place in Travancore or to Arabia, and his being claimed by Muslims and Christians (but not by the Jews) as a convert to their religion.

Three Cochin copies of Keralolpatti and other documents on palm-leaf describe his (subsequent) conversion (to Christianity) by one or two missionaries come to Cranganore from Baghdad, and record the date of their coming, in the chronogram "*rauravam devarājyam*", which means that in the Malabar Brahmins' opinion "the Kingdom of God" preached by them is really the horrible hell called "*rauravam*" in Sanskrit, and also that the king's<sup>5</sup> land has been converted into hell of the worst type by his conversion (to Buddhism and then to Christianity) in 317 A.D., on Thursday, 14th February, the date denoted by the chronogram.<sup>6</sup> At least two other chronograms seem to appertain to this king, viz:—

wards, and of the Gopi and arrow of the South Indian account current at least down to 1520, is the *Passio Thomae* of about 500 A.D. The contents of this Latin work could have been made known in Malabar and Mylapore by the Portuguese in the 16th century, in which the above *volte face* took place.

Why was part of the tomb of 1523 left outside the wall of the church? Probably to satisfy the rival muslim claimants? And it was the portion containing the head that was left to the Muslims. For digging *from outside* the excavators of 1523 A.D. found the skull bones first.

5. Deva in Sanskrit means god, or king. It was "the Kingdom of God" that Jesus and his followers preached as we see from the Bible and later documents.

6. Chronograms about this king seem to have been current in 1604, for Archbishop Roz of Cranganore recorded in that year that a Cheraman Perumal (— a Chera king in general) "died on 1st March, 1258 years before," i.e. in 346 A.D. Assuming this Perumal to have been the king who granted Thomas Knāy, the founder of Makōtai (see footnote 3) the famous copper-plate charter lost or missing since 1544, the year 345 just before his death has been (after 1604) assigned to that document. But Makōtai is not found mentioned before the 7th-8th century in Tamil works.

1. *Cēraṁaṁ deśaṁ prapa* — the Chera king arrived in the land (that fell to him at the partition of his kingdom, and not in Mecca), the year being 343 A.D.

2. *Bhūvibhāga* — the partition of the land, the year being 343 A.D. itself.

Now which is this land to which that convert was exiled, or retired? It was probably Neelan-péroor (= the great village of Neelan) south of Cranganore, from which he could exile himself to the former in a boat. The temple outside the walls of which Pallivanavar's grave is located is called Perinjenattu Palli, which means the vihara of Perum-Jina, the Great Jina, i.e., Mahā Buddha. The Buddha too is called *Jina*. Besides, a plot of land very close to that temple and the grave is called Tiruvanchikkalam, which is also the famous name of the capital of Pallivanavar and other Chera kings in Cranganore. The tax on that piece of land north of the grave is paid to the above original capital's temple.

And some 40 years before 1928 (*ca.* 1888) there was dug up at Nilan-pērūr a bronze statuette *with a Greek cross embossed on its chest*, from the earth under the floor of a building believed by the Hindus to have been built over the tomb of a Cranganore king, a Chera, known among them as Paḷḷi-vāṇa-perumāḷ, i.e., the Chera King who resided in, or ruled over a Paḷḷi — a Buddhist vihara, or a Christian church. Photos of this statuette were, in 1928, published by the present writer in India and Europe (Warsaw).

On digging deeper the workmen (Christians engaged by the Hindus) struck upon a cross sculptured on a granite slab, and they refused to dig further or lift the slab under which they thought Pallivanavar was resting, perhaps in a sitting posture. No study of the cross on the slab, and the things underneath has yet been made. See this *Journal* for April 1948, pp. 27-44.

Besides the above two crosses, one on the statuette, and another on the granite slab covering the grave, there were four other crosses in the same locality, and associated with the same Buddhist-Christian Pallivanavar. One was at the top of the staff in the right hand of the above statuette. It was broken off in the process of the hurried excavation at night for valuables supposed to be in the grave. The fourth cross was on the chest of a fairly big granite statue of Pallivanavar set up outside the building covering the grave. That statue was plucked up years ago and thrown into a tank there. A granite cross was found also fixed to the slab in the grave, during the excavation of *ca.* 1888. The original building over the grave was cross-like in plan, and three-storeyed (symbolis-

ing the Triune God?). When it was in ruins the present small building replaced it some decades ago. The above granite cross was about a foot tall.

The years 317 and 343 A.D. yielded by the above three chronograms in the Hindu documents are subsequent to the conversion of Constantine in October 312, and his edict of toleration in 313; and 343 is posterior also to the "Invention of the Cross" in 326 by Constantine's mother Helena. In 315 Papa the first Catholicos of Seleucia, very near Baghdad, held a Synod, and we may suppose that the missionaries of 317 were sent opportunely to the Buddhist Pallivanavar, hated by the Cranganore Brahmins, and therefore ready to abdicate. (See picture on p. 122).

#### IV. A TAXILA CROSS

A small equal-limbed cross of stone with a hole at the end of one of its limbs "was turned up by the plough in a field in the borders of the ancient city of Sarkap in Taxila in the year 1935, and given to Mrs. Cuthbert King by the Zamindar who found it. The material of the cross is dark stone of the same geological nature as that used for small trinket boxes believed to date from the 1st to 3rd Century A.D. and now in Taxila Museum. The cross was found with a hole bored in it, which is most unusual", as an article on the cross published in North India says.

The hole indicates that the small cross was meant to be hung from the neck as a sacred object. It may, therefore, be regarded as a Christian cross, and assigned to Constantine's (306-337 A.D.) fourth century, or a later one. The Taxila-Sarkap<sup>Kalam</sup> region where, as historians agree, St. Thomas preached and converted King Gudnaphar of India, viz., the Parthian Gudaphar (= Gondophares, A.D. 19 to about 60) was likely to have had Christians in later centuries also. In about 196 Bardaisan the Syrian notices Christians among the Kaishanaye, i.e., the Kushans, and some or many of these Christians may have been among Kanishka's N.W. Indian Kushans. In about 260 the Syriac *Doctrine of the Apostles* says that India (= N.W. India, and not the whole of modern India-Pakistan and Burma) and all its own <sup>own</sup> centuries (in N.W. India) received the Apostle's hand of priesthood from St. Thomas (some countries <sup>let</sup> directly from him in the first century, and the rest indirectly in the 2nd-3rd centuries after his death.) It is probable therefore that in the days (ca. 260) of the author there were Christians in N.W. India. In the 5th century (420 to 497) there were bishoprics in Afghanistan and Baluchistan, and N.W. India close to them was not unlikely to have had Christians and even bishoprics. And in about 500 A.D. Cosmas



found multitudes of Christians among the Huns of N.W. India and "the rest of the Indians." See § VII *infra*.

#### V. ANOTHER TAXILA CROSS, 3RD CENTURY B.C.

The *Examiner*, a Catholic weekly of Bombay, published in May 1946, the following details: "Only twenty-four miles from Rawalpindi, are the ruins of Taxila, where according to tradition" (recorded in the *Syriac Acts of Thomas*, 200-20 A.D.), "the Apostle St. Thomas visited the Court of King Gondophares, who reigned from 20 to 60 A.D. \* \* \* \* \* On Sunday, 28th April, the Foundation Stone for a new and large Holy Family Hospital was laid there. Some years ago, the local Commissioner, Mr. Cuthbert King, and his wife" (referred to in § IV *ante*) "produced a beautiful drama in the ruins of Taxila, based on these legends."

"Recently at a Red Cross meeting, Major-General Sir Gordon Jolly, Chief Commissioner of the Joint War Association, stated that the Geneva Red Cross with its white background was in existence in India more than 2000 years ago, and continued:—

"Among my treasured possessions has been a piece of carnelian, (a half-inch square), ornamented with a Red Cross on a white ground. This was dug up at Taxila in the Punjab and archaeological evidence shows that it was fashioned there in the 3rd century B.C., more than 2,000 years before the founders of the Geneva Convention adopted this device as their emblem. In view of its historical interest to the members of the Red Cross movement in India, I am giving it to the Indian Red Cross Society."

#### VI. OTHER PRE-CHRISTIAN CROSSES

"A cross appeared in the earliest remains of \* \* \* \* civilization, for instance on the Mohenjodaro Seals (in Sind) of the fourth millennium B.C. See Seals No. 108, 528 b, Plate CXIV, Vol. III. *Mohenjodaro and the Indus Civilization*, by Sir John Marshall and Allan's *Coins of Ancient India*, British Museum, 1936, Plate XXXV, where the same designs appear on the cast coins of the third and second century B.C."

A cross appears on punch-marked Indian coins also. For example an equal-limbed cross sign is found among those on Nandivardhana's punch-marked coins, on the plate illustrating Sri D. D. Kosambi's article, "Chronological Order of Punch-Marked Coins" from the earlier Taxila hoard, JBBRAS, Vol. 24-25, 1948-49. The limbs of the cross are broad, like those of the Taxila cross of Section IV. and at its centre is a circle with a dot at the centre.

Four smaller circles with horns touch the four sides of the central circle. This may represent the Sun-god, while the horned circles may each stand for another god (Mercury ?), or the Bull of Siva. These are ancient symbols found on other punch-marked coins in the same Taxila hoard, along with a  $\div$  cross.

## VII. BANIA BERI CAVE CROSS IN C.P., 6TH-10TH CENTURY

"In Bania Beri Cave" (within 5 miles from Pachmarhi, a proto-neo-lithic site with rock-paintings, in the Mahadeo Hills in the Central Provinces, and south of the Vindhya and upper Narbada) "is depicted a large Cross around which is a group of men, most of them holding in their hands what may be a raised umbrella (Plate XI). It looks like a 'Cross-worship' scene. The cross represented here may be a primitive or conventionalized form of svastika, a sacred symbol in India (as also in several other countries) from the earliest times. Below the 'Cross-worship' scene are three animals, probably cows . . . . . The wavy line below these animals may probably represent a stream, on the other side (bottom) of which is a long row of small animals, probably goats. In the same cave is painted another cross (Plate XII A), composed of small triangles, which have a look of having been made out of stencil (?)."

The above is Sri B. B. Lal's description of the Cave-painting, on pp. 47-8, of *Archaeology in India*, published by the Government of India in 1950. On page 49 of *ibid.*, the age of the painting is given as "the period between the sixth and tenth centuries" A.D. From Plate XI in that book it is seen that the cross is at least as tall as any of the men dancing around it. It is an equal limbed cross technically known as the Greek cross, though in the painting the vertical portion appears shorter through perspective representation. The limbs are at least as wide as any of the dancers' chest. There is no sign of its being a *Svastika*; it appears to be a regular Christian cross of the earliest type, the Greek cross, like that on the Pallivanavar statuette of about 330 A.D., or the Mount Cross, both dealt with in previous sections.

It may be added that in the sixth century Cosmas Indicopleustes (ca. 525) found Christians and a Persian bishop in Kalliana (= Kalyan, near Bombay), and "so likewise (multitudes of Christians, as he says) among the Bactrians and Huns and Persians, and the rest of the Indians", that is, the Indians in the parts of India other than Male (= Malabar), and Kalyan, and the White Hun territories of W. and N.W. India, in all of which three regions he found multitudes of Christians, as well as the Indians in Myla-

pore and other places on the east coast of India, of whom he says he had no information.

And between 628 and 643 A.D. a Metropolitan was appointed in India. "The Christians of India proper increased in number to such an extent that a special Metropolitan see with some six to twelve suffragan bishops had to be created for them. This was done, according to Ibn-at-Tayib" (the Nestorian canonist, who died in 1043) "by the Patriarch Isho-Yahb II (628-43). \* \* \* \* \* in rank the Metropolitan of India took precedence of that of China, and the Metropolitan of China of that of Samarkand." See Mingana's *Early Spread of Christianity in India*, Manchester, 1926, p. 64. The seat of this Metropolitan of about 635 A.D. is not found mentioned. It was perhaps in the Hun region mentioned as a Christian area a century before by Cosmas, and the actual locality might have been Gandispur. For "Gandispur (modern Shahabad in the Panjab, which tradition associates with St. Thomas and where, later, there was a famous medical school" (according to Barthold, *Zur Geschichte*, p. 27) "is referred to by Elias metropolitan of Damascus as the seat of a metropolitan in A.D. 893, and is also included in the list given by Amr, A.D. 1349." . . . . . See Yule, *Cathay*, III, pp. 22 ff. St. Isidore (*d.* 636) of Seville, Spain, a contemporary of this first Metropolitan of India (*ca.* 635) says that Saint "Thomas preached to the Parthians and the Medes up to the furthest eastern parts (*ad extremam orientalem plagam*), and there preached the Gospel and suffered martyrdom. Indeed being pierced with a lance, he died at Calamina, a town of India, and was honourably buried there on the 12th before the Kalends of January" (December 21). According to his own *Etymologiarum Liber*, Parthia extended "from the Tigris to the Indus." That "town of India" could not be in S.E. India; and fairly resembling Calamina in sound, there are the ancient Kalawan, and Kala-ka-Serai, both in Taxila in the Panjab, where historians now unanimously locate king Gudnaphar of the *Acts of Thomas* (200-220 A.D.) as the Scytho-Parthian Gudaphar (Gondophares). The *Acts* leads us to infer that the capital of King Mazdai (a regular Old-Persian name, and not South Indian), whose soldiers killed St. Thomas, was very close to Gudaphar's city, the distance between them being only about a day's journey by bullock cart.<sup>7</sup>

7. No kings with Parthian or Old-Persian names are known, or likely to have been ruling, in Malabar or Mylapore, and no South Indian place-name resembling Calamina has yet been discovered. Besides, a tomb of a Muslim Saracen come from Nubia, or of St. Thomas of Palestine, or one claimed (as in 1293) by both Muslims and Christians is not known to have

## VIII. BUDDHIST CAVE CROSSES IN BURMA, 1237 A.D.

Though not so ancient as the non-Christian and Christian crosses of the 4th millennium B.C. to 6th-10th century A.D. discussed in the previous sections, the 8 crosses of Greek (four) and Latin types (four) painted on a wall of the Buddhist cave attributed in tradition to King Kyanzitha of Burma (A.D. 1084-1112) may be dealt with here.

The Report for 1922 of Mr. Charles Duroiselle, the Superintendent of Archaeology, Eastern Circle, gives us the following particulars about the paintings in that cave close to Pagan, in Burma :—

“Some of the interior walls of the cave are ornamented with a variety of well-executed frescoes, which are on the whole very well preserved. All do not represent Mongol personages, but those that do were probably painted during the occupation of the city, and their fall” (*sic*, for *date* ?) “therefore may be put down as 1287. \* \* \* \* \*

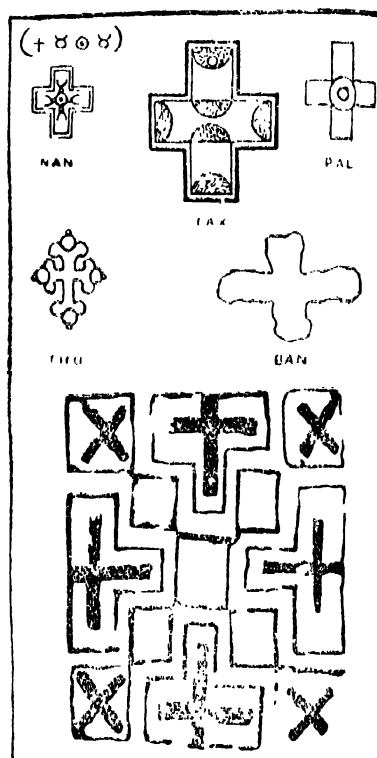
“35. Not far from the figures of the Mongol officer and soldier, \* \* \* \* are found pictures of crosses, unmistakably Christian crosses ; as has been said above, the Kyanzitha cave is a Buddhist monument, hence the interest of the Christian symbol on the walls, at the Burmese capital, in the closing years of the 13th century.” \* \* \* (The crosses) — “They are yellowish, the fibres and the knots in the wood” (of the crosses) “are very realistic, leaving no possible doubt as to the materials intended to be represented, \* \* \* Our fresco represents both kinds” (the Greek and Latin crosses), “and four of each, the Latin crosses being somewhat bigger than the others. These crosses are, as far as is known, the earliest testimony, if not of established Christianity, which I doubt, at least of the presence of Christians in the Buddhist metropolis.” \* \* \* “That among the immediate entourage of these Tartar Emperors (of 12th and 13th centuries), among their troops and officers, there was a large number of Christians cannot be doubted : historical records, as a matter of fact, show this to have been the case. \* \* \* \* The conditions during the reign of Kublai Khan (1260-1294) whose troops took Pagan in 1287, were in no

existed in Mylapore in any of the first 12 centuries before Marco Polo (1293). A pilgrim Theodore visited in about 590 A.D. the tomb of St. Thomas at the place (called Calamina by St. Isidore about 40 years later) “in India where ~~he~~ first rested” (as distinct from Edessa which too he visited, and where St. Thomas’ bones were then resting for the second time), and described it (then devoid of bones, yet held sacred) to St. Gregory of Tours in France.

way different. \* \* \* \* He himself had a Christian bodyguard of 1000 warriors, and Christians were to be found among his troops and no doubt among his officers. \* \* \* and Morco Polo is quite explicit as to the existence of Nestorians in Yunnan in the 13th Century."



Sketch of bronze statuette of Pallivānavar,  
Cera King, 317 A.D., who became a  
"Bauddha" (see pp. 115-117)



NAN.—Nandivardhana's cross (p. 118)

TAX. Taxila cross (p. 117)

PAL. Pallivānavar's cross (p. 116)

THO.—St. Thomas Mt. cross (p. 111)

BAN.—Bania Beri cave cross (p. 119)

KYA.—Kyanzitha cave crosses (p. 121)

# ~~❧ An Indian Christian Date, A. D. 317,~~ **from Hindu Documents**

BY

T. K. JOSEPH, B.A., L.T.,

~~Trivandrum~~

## I

The dates 52 and 72 A.D. for the coming of St. Thomas to South India and his martyrdom there (as tradition, which, it may be remarked, is not found recorded definitely in any document prior to *The Book of the Bee* by Bishop Mär Solomon, Metropolitan of Basrah, says, circa 1222,) have been accepted by many authors since the 19th century as the most reliable or probable among

(a) 50, 51, 52, 52-53, 67, 78, and 84 for his coming, and

(b) 58, 65, 67, 68, 72, 73, 75, 78, <sup>82,</sup> 90, and perhaps 93 also for his death, rejecting even 68 A.D. given in the Latin inscription on the Gospel side of the Mylapore tomb Madras (South India). All these are evidently dates arbitrarily assigned to the two events by Christian calculators according to their own reasoning, since the 18th century.

## II

But in three purely Hindu documents of Cochin in Malabar (South India) there was discovered by a Hindu gentleman—Mr. V. K. R. Menon, M.A., M.Sc. (Lond.)—the chronogram *rauravam lēvarājyam*, it being the kali day of the coming of Christians to Cranganore (ancient *Muziris* of the *Periplus*, Pliny, *Tabula Peutingeriana*, Ptolemy, and other writers), and their converting the Chera king of that city of Malabar to Christianity. *Rauravam lēvarājyam*, meaning the Kingdom of God—(preached by the missionaries come from Baghdad)—is *rauravam*, the horrible hell of the Hindus) is found in one of the above documents, among about a dozen chronograms relating to ancient Malabar events, and denotes Thursday, 30th *Kumbham* of the *Kali* year 3418, or 14th February 317 A.D.

The third of the above palm-leaf documents says, in substance, that in the days of the 7th Perumāl (=the Chera King of Cran-

ganore) one or two *Bauddhas* (= non-Hindus) came from Baghdad in a foreign land, landed at Mahōdēvar (=Makotai of Tamil), proceeded to Cranganore (the capital), and made known to him their *Śāstra* (= doctrine), and that the king being converted, insisted that all should adopt this *Śāstra*.

The language of the narrative from which the above passage has been taken is not Tamil of 317 A.D., but Malayalam of about 1700, or 1600. It appears, therefore, that the narrative is a modern record of events found in long-standing Hindu tradition. This is evidenced also by the name Mahodevar, and the words '*Bauddhas*', '*Śāstra*', and '*Veda*'. These are used not in their ancient senses in Sanskrit, but in the general Malayalam senses respectively of despicable non-Hindus (Buddhists, Jews, Christians, Muslims, etc.), any non-Vedic doctrine, and religion. '*Veda*' seems to have been given the sense of 'religion', especially Christianity ('*Satya-Vedam*', = true religion, in Tamil) by the Madura Missionary Robert de Nobili (1605-56), and it gained currency in Malabar Christian writings also. Presumably, De Nobili found some fancied resemblance between Sanskrit '*veda*', and Greek *hodos* (— 'The Way', Christianity), or Latin '*fides*' (— 'faith', Christianity) !

The Arab city of Baghdad, we know, was built only in 763 near Seleucia-Ctesiphon, on a very ancient site of the same name, and Bar-Hebraeus (1246-1286) says that Elias, the Greek Patriarch of Antioch, re-established at Baghdad, in 910, the ancient residence of the Orthodox Catholics, which had been unoccupied since the Nestorian schism (A.D. 432).—(*Chronicon Eccles.*, ed. Lamy, II. 236). Marco Polo (1293) says that the Bishop of the Isle of Males and the Isle of Females is subject to the Archbishop of Socotra, who is under the great Archbishop of Baudas (Baghdad). But Baghdad in the above extract from Malayalam may mean Seleucia, or the Semitic region in general.

And as for Mahōdēvar, it was founded in the 7th-8th century, there being no reference to it earlier, although Malabar Christian tradition ~~and~~ Bp. Roz? (1604) assigns its foundation to 345, i.e., some months before the 1st of March, 346. See IV *infra*. Much later dates also are given by others (e.g., Do Couto, 811 A.D.; De Barros, 886; a chronogram, 745 A.D.).

### III

It may be recalled here that long before the discovery of the above documents in 1940, there was mention of a Chera King's conversion to '*Mārgga*', in published Hindu records called *Kēraḷōl-*

*pattis* (= origin of Malabar); and *Mārgga* (= 'Way') was held to be Buddhism, Christianity (= 'The Way', *hodos* of the Gospels), and Islam respectively by the Hindus, Christians, and Muslims of Malabar. *The Times of Malabar did not bother himself about it.*

And some forty years before 1928 there was dug up at Nilanpērūr in Central Travancore, a bronze statuette with a cross on its chest, from the earth under the floor of a building believed by the Hindus to have been built over the tomb of a Cranganore (Chera) king known among them as 'Paḷḷi-vāṇa-Perumāl', i.e., 'the Chera king who (had left his capital, and) resided (after conversion) in a Paḷḷi', a house of devotion (belonging to any non-Hindu religious community in Malabar). Photos of this statuette were, in or after 1928, published in Travancore, and in Europe by the present writer in the *Kerala Society Papers* (1930), in his *Malabar Christians* (1929), and in the *Bulletin of the International Congress of Historical Sciences*, Warsaw, Poland (1933). It is not unreasonable to believe that this cross-wearing king is the same as the one converted to the 'Baghdad Bauddhas' '*rauravam*' (Christianity, orthodox or Arian?) in A.D. 317. For Hindu documents know only the tradition about a single Hindu king who was converted to '*Mārgga*', or '*Veda*'.

#### IV

At least two other Hindu chronograms seem to appertain to this king, viz.—

(a) '*Chēramān dēśam prāpa*' (= the Chera king arrived in the land, or at the place—presumably, the place where the above statuette was unearthed). This indicates 25th *Thulam* of *Kali* 3444 = A.D. 343.

(b) '*Bhūvibhāga*' (= the partition of the land—presumably for giving the portion where the statuette was found, to the king). This indicates *Kali* 3444 as before.

Chronograms about this king seem to have been current in 1604 A.D., for Archbishop Roz of Cranganore recorded in that year that a Perumāl (= Chera king) of Cranganore "died on 1st March, 1258 years before", i.e., in 346 A.D. Was it the above cross-wearing king? Probably it was.

#### V

The date 317 comes after the following events in the near west:—

(1) A.D. 312 (October): Conversion of Constantine (306-337) on seeing "the trophy of a cross of light in the heavens, above



the sun, and bearing the inscription, Conquer by this: toutō nika" (Greek).

(2) A.D. 313: Edict of Toleration by the same Emperor.

(3) C. A.D. 313: Arius' heretical propaganda began.

(4) A.D. 315: Synod of Papa, first Catholicos of Seleucia—Ctesiphon (280-328), very near the Baghdad of the extract in II *ante*.

We may suppose that a Bishop from Cranganore (if there were one there at that time) attended this Synod and informed Papa of the condition of Christians in Malabar, and of the conversions of Malabar Hindus to Buddhism. So the Catholicos, with his new-gained dignity and zeal, secured, we may assume, a letter from Constantine the Arian to the King of Malabar, and in 317, sent to him 'one or two Bauddhas', with that letter. They came, they preached, and they converted him (? probably to Arianism) from, say, Buddhism which perhaps he had already embraced. [Bishop 'John of Fars (or Persia ?) and Great India' (325 A.D.) was not in Nicea from Cranganore. See XI *infra*.]

## VI

Now, "about A.D. 295-300, Dūdi (David) bishop of Baṣrah—left his see and went to India, where he evangelised many people", says Dr. Mingana in his *Early Spread of Christianity in India* (1926), pp. 18 and 63 of reprint. Granting that 'India' here was not one of the ancient pseudo-Indias (See XIII, Arabia, Ethiopia, etc.) West of Persia, could we imagine that Dūdi was one of those preachers sent to Cranganore in 317? 'About 295-300' is only a rough estimate by Dr. Mingana. We must wait for a definite date for Mar Dūdi's journey.

## VII

According to Assemani (*Bibl. Or.* I. 524) Awgin or Eugene (died April 363) came from the Nitrean desert in Egypt with seventy disciples to Nisibis in Northern Mesopotamia, and founded near it, in Mount Izla, a monastery, where he gathered three hundred and fifty monks, and from this two missionaries are said to have been sent to India according to the Syriac work *The Preaching of the Apostles* (which we cannot consult here). Were they the two who came to Cranganore in 317? Probably not. The two disciples from the school of Awgin came very probably to North West India, rather than to Arabia, or Ethiopia, or South India.

## VIII

We know that a few years before, i.e., "between 265 and 270", Mār Ammō the Manichaean missionary came to the Kushan country beyond the Hindukush, to the N. W. of India, i.e., "beyond Marv into the former Kusān dominions and reached districts near Balkh, possibly even Balkh itself," as Dr. W. B. Henning says in the *Journal of the Greater India Society* for July 1944 (XI, No. 2), pp. 85-90, and in the *Bulletin of the School of Oriental and African Studies*, 1947 (Vol. XII, Pt. 1), p. 49. Did Mār Ammō, "Mani's Apostle of the East" as Dr. Henning styles him (in the above, p. 49), or his successor send to Cranganore the two missionaries of 317 A.D. ? Probably not.

## IX

Far south of Mār Ammō's region, viz., in the Indus estuary and its neighbourhood called Scythia (= the land of the Indo-Scythians and Scytho-Parthians, 'Sakadvīpa' of Hindu writers) in the *Periplus* (60 A.D.), there seem to have been Manichaeans under Adda, a direct disciple of Mani, in c. 317, our date from the *rauravam* chronogram. For Epiphanius of Judea, Bishop of Constantia in Cyprus (315-402) says in his Greek work against heresies, *Adversus Haereses*, 374-377 A.D. (Migne, P. Gr.-L., XLII, col. 47) that "Adda went to the further region", i.e., some region east of Persia, or of Manes' own land Babylon. Again *Acta Disputationes Archelai* (Ch. 11) says, 'Adda partes sortitus est Oriētes', and further down, 'Addas vero Scythiae (partis...voluit occupare.)'—Ch. LIII). The original of this *Acta* was in Syriac by Archelaus, Bishop of Cascara (Kaskar) in Mesopotamia, lying on the outskirts of Seleucia. (See Medlycott's *India and the Apostle Thomas*, 1905, pp. 203-11).

The 'further region', 'partes Oriētes' and 'partis Scythiae' mentioned above indicate the Indus estuary and neighbourhood. And *Oriētes* ('the East') in the Latin translation perhaps stands for the Dravidian (Brahui) country of the Oritae, or Orae immediately to the west of the river Hab now forming the frontier between India and Baluchistan. (See *Cambridge History of India*, I, pp. 380-81). The Orae are mentioned in the *Periplus* also. They are the Oritai of Nearchus, Horitae of Q. Curtius, Oretes of Pliny (77 A.D.), and Oreitans of Dionysios Periegetes. What the Syriac form of 'Orae' or 'Oritae' was in the Syriac original of *Acta* we do not know. Some years later Theodoret (died 457-8) converted 'Scythia, of the *Acta* into 'Syria', and 'Adda' into 'Alda', in his sentence, "Et Aldam quidem ad praedicandum

misit in Syriam." Greek A^A^A for A^A^A in uncials is, of course, an excusable error. (See Postscript 1 for Dr. Henning's remarks.)

## X

From the above Indo-Scythian region Adda could send Manichaeans to Cranganore in 317 A.D., and if they were of Semitic stock they could be described wrongly as having come from Baghdad. We brought Manichaeans into the picture simply because there is a theory (based on the name of *Māṇikka-Vāchakar* who is said to have re-converted some Christians of Quilon in Travancore to Hinduism—Saivism—by his *sorcery*) that Manikka-Vachakar was a Manichaean. And 315 A.D. is the date given in a Travancore Christian MS. of about 1830 for that defection. (Incidentally it may be mentioned that the author of that MS. was visited by Dr. Buchanan, who drew also a picture of that scholar for his *Christian Researches*. Did that scholar get the date 315 from Dr. Buchanan?) Dr. Henning, dealing with two Manichaean magical texts in the *Bulletin*, 1947, Vol XII, Part 1, quoted in VIII *ante*, characterises Manichaeism as wallowing in "the slime of witchcraft and sorcery" (p. 39 of *Bulletin*).

Instead of asserting that the abovenamed sorcerer from the Tamil country was *not* a Manichaean, we shall leave the problem to be solved after further research, observing that Adda's Manichaeans from the estuary of the Indus could easily come to the Tamil country on the Coromandal Coast through Central India and spread that religion there, imbibing at the same time Saivism and other religious cults found there, and that from the Tamil country Manichaeism masquerading at once as Christianity and Saivism could reach Quilon on the West Coast and cause the secession. The better known Manikka-Vachakar of the Tamil country is certainly not of about 315 A.D., but of a much later age.

It is possible that the man's original designation was Manichee—*Vaśakara*<sup>M</sup> (=Manichaean Sorcerer, versed in *vaśakriyā*, charms, incantations, etc.), and that later on it came to be assimilated to the wellknown title Manikka-Vāśakar (=of ruby-like utterances).

## XI

The two "Baghdad Bauddhas" could also be supposed to have come to Cranganore from one of the following quarters:—

1. Antioch in Syria, under which was Seleucia—Ctesiphon, ecclesiastically, for some time.

2. Edessa, where Aphraates (275-345), a monk commonly called 'the Persian Sage,' was Bishop. For Nisibis near it, see VII.

3. Fars in <sup>C.</sup> N.W. Persia, with Riwardashir as metropolis, N.W. of modern Bushire. Dr. Mingana (Early Spread... in India, p. 61) says "that the Metropolitans of this city had much to do with the bishops of India proper, and probably all the bishops of India before about A.D. 330 were under the jurisdiction of the Metropolitan of Riwardashir." In our opinion Fars had under her only the Bishops along the Persian Coast up to the Indus valley as well as those of South Arabia, and sometimes of Ethiopia, both called India. It is possible, therefore that Mar John who signed himself as 'of Persia and Great India' was in 317 bishop of this Fars and "Arabia Magna."

He must have signed in Syriac (and not in Greek or Pahlavi), and the name must have been *Pares*, which in Syriac denoted either Persia in general, or Fars in particular (*ibid.*, p. 59). We take *Pares* in the restricted sense, and believe that John was of Fars, and his Great India was Arabia Felix, called by the Greeks Arabia Magna extending to the *farthest ocean*. Since Arabia was anciently (wrongly) called India by non-Greek and non-Latin people, Mar John probably put in 'India' Magna, Great India. See XIII. His jurisdiction may, or may not have extended to Ethiopia, which was also (wrongly) called 'India.' "The bishops of the country (of the Kutars in *Arabia*) were under the jurisdiction of the Metropolitan of Riwardashir," says Mingana (p. 58 of *ibid.*).

On pp. 63 and 13 of *ibid.* he says that "Great India is used of Ethiopia and Arabia Felix combined," by Michael the Great, the Syrian, Jacobite Patriarch of Antioch from 1166-99. This combination is probable because (as we know from South Arabian and Ethiopian history) until A.D. 378 or so both Ethiopia and South Arabia were under the same king, ruling from Aksum. So Mar John may have been Bishop of this "Great India" and of Fars in 325, and not of India proper.

## XII

Like those coming from Baghdad or Seleucia, those from Antioch, Edessa, and Fars mentioned above in XI, must have come through the Persian Gulf. The question is chiefly whether the two 'Baghdad Baudddhas' came to Cranganore in 317 from Seleucia or from Fars. Personally we are inclined to vote for Seleucia, ignoring even the possibility of their having come from Alexandria (in Egypt), where in 317 Alexander (d. 328) was bishop, with Athanasius '*contra mundum*' (300-373) as his deacon.

Alexandria seems to have had no ecclesiastical relations with 'India Orientalis,' 'India of the Brahmins,' 'India in the confines of the world'—i.e. India proper, the India of Bartholomew and Pantaenus being "Citerior India *arherent to Ethiopia*," as Rufinus (C. 368) describes it (*H.E.* 1, 9: "*Aethiopia, eique adhaerens citerior India*"), or as Socrates (5th cent.) translates it, "*India quae Aethiopiae confinis est*—(his Greek word is 'Sunemmenen')—to distinguish it from 'India of the Brahmins.' Before Rufinus Eusebius had (c. 325) recorded that Pantaenus (A.D. 189-90), according to tradition, went as far as the 'Indians,' which was a vague term used to denote Ethiopians, Arabians, etc., besides the Indians of India proper. It was Jerome (342—420) who, without citing any tradition, or document (see Mingana, *op. cit.*, p. 17), and probably without having read Edesius the Phoenician's oral account recorded by Rufinus his contemporary (in *loc. cit.*, *supra*), who gave the wrong lead by interpreting the "Indians" of the tradition noted down by Eusebius—even he cites no Pantaenus document)—as the Brahmins, definitely, in his sentence: "*Pantaenus — — — missus est in Indiam, ut Christum apud Brachmanas — — — praedicaret.*"

### XIII

Like most other Latins and non-Byzantine Greeks Jerome very probably had the notion that Indians and India found even in non-Latin and non-Greek records meant the Brahmins and India proper in every instance 'Citerior India' is probably not Rufinus' own term but a quotation of Edesius the Phoenician's term; and there is evidence that the ancient Syrians, Hebrews, and Persians, and the Byzantine Greeks had 'Indias' and 'Indians' west of Persia. (See this *Journal*, 1947, pp. 175-87.)

### A

Bevan says: "Spiegel has clearly shown by sufficient references that, at least in Sassanian times and doubtless earlier," (than 226 A.D.) "there prevailed an idea of an India in the west as well as an India in the east" at the extreme ends of the Iranian world (*Camb. Hist. of India*, I, p. 425.).

### B

Bishop Mar John the West Syrian (6th cent.) said that "all the regions of Ethiopia" formed India—"Indiam omnem plagam Aethiopiae accepimus." See the Bollandists' *Acta Sanctorum*, 58, p. 672. Abdias (c. 600) the Syrian says: "*Indiae tres esse ab*

*historiographis asseruntur. Prima est India, quae ad Aethiopiam vergit; secunda, quae ad Medos; tertia quae finem facit.*" See J. C. Thilo's *Acta S. Thomae Apostoli*, Lipsiae, 1823, p. 113. Here India No. 3 is India proper; No. 1 is Arabia (=Edesius—Rufinus' 'India adherent to Ethiopia'). No. 2 seems to be Mesopotamia—Assyria. See XIII D.

## C

As for "Indians", Pseudo-Kallisthenes (4th cent.) is the first known non-Semitic (Byzantine Greek) writer who calls the Ethiopians Indians by saying (in 3. 7: McCrindle's *Ancient India—Classical*, p. 179) that at Auxum "a petty Indian king resided." In the 7th cent. we find that Theophylactus called the Homerites of South Arabia Indians (*Acta Sanctorum, ut supra*, tom. 58, p. 672).. Aphrahat the Syrian (275-345) called the Ethiopians Indians.

## D

For Indians and Indias of Syriac authors other than those cited above (XIII B and C) see Mingana (*op. cit.*, pp. 11—14), who confesses (p. 11) that "The problem is very complex, and we dare not here attempt to solve it in its various phases and developments." He cites Aphrahat (275-345) the Syrian of Edessa, much earlier than Mar John (6th cent.) or Abdias (c. 600) quoted in XIII-B, to show that he called the Ethiopians Indians (p. 12). Aphrahat is not perhaps one of the writers referred to by Abdias (c. 600) in his phrase "*ab historiographis asseruntur*," quoted above. These historiographers' writings do not probably exist now. (See Postscript 2).

## E

Another Semitic writer, one anterior to Aphrahat, viz., the author of 1 Maccabees, written "In the 1st or 2nd decade of the 1st century B.C." also tells us (ch. 8, v. 8) that "the country of the Indians and of the Medes and of the Lydians, some of their best provinces" (i.e., of Antiochus the Great, B.C. 223—187) were taken by the Romans and given to king Eumenes of Pergamum. This India cannot be in India proper. It is probably India No. 2 of Abdias, verging on the Medes ('India quae ad Medos vergit'), although some commentators correct 'Indians' in that verse into 'Ionians,' under the wrong notion that there were no Indians or Indias west of Persia.

## XIV

Were there Christians in Malabar before the conversion, in 317 A.D., of the king of Cranganore? We have no evidence. St. Bartholomew (c. 50), and Pantaenus (189—90 A.D.) did not come to Malabar or any other part of India proper. See XII *ante*, and Mingana, *op. cit.*, p. 17. As for Bishop Mar Dūdī (VI *ante*), his date and his 'India' have yet to be ascertained.

The earliest documents on Christianity in India may be considered here. They are (besides the spurious 1st century *charitam*, XX *infra*) :—

1. St. Thomas' letters from India (not extant).
2. A genuine *Acts of Thomas* in Syriac (probably the original of No. 3 below).
3. The Syriac Gnostic *Acts* of c. 220 A.D.
4. *The Doctrine of the Apostles*, c. 260, also called *The Edessene Canons*, or *The Canons of Addai*, and quite different from the *Didache* and the *Didascalia*," *ap.* Dr. Burkitt.

Of these four, Nos. 3 and 4 alone are now available for consideration. The latter, *The Doctrine of the Apostles* (of the 3rd cent. according to Dr. Burkitt), by an Edessene author 'who flourished not much later than A.D. 250' (Mingana, *op. cit.*, p. 16, a), i.e., in about 250, let us suppose, says definitely that "after the death of the Apostles there were Guides and Rulers in the churches..... (who) at their deaths also committed and delivered to their disciples after them everything.....also what..... Judas Thomas (had written) from India, that the epistles of an Apostle might be received and read in the churches, in every place, like those Triumphs of their Acts, which Luke wrote, are read, that by this the Apostles might be known." "The passage seems to have stood originally in the *Doctrine of Addai*," of circa 200 A.D., as Dr. Farquhar says (in *Thomas in North India*, 1926, pp. 27, 33). Perhaps St. Thomas' letters ceased to be read by c. 260 A.D., or c. 200.

## XV

The genuine *Acts of Thomas* can reasonably be supposed to have incorporated incidents of the period before the martyrdom, from these letters to Edessa, and those after it from letters written by one of St. Thomas' disciples in Mazdai's kingdom in India proper, e.g., by Sifur the General, Wizan (Mazdai's son) ; or Xanthippus the deacon, or even Gondophares. And the

Gnostic manipulator had no reason to replace the genuine incidents already well known, for seven generations, by fabrications of his own, his sole object having been the interpolation of discourses, prayers, etc., inculcating Gnostic doctrines. See Medlycott's *Thomas in India*, pp. 291-2, where the conclusion of von Carl Schmidt ("In my opinion a Gnostic romance of the Apostles is a phantom") is quoted. *Vide also Preface to op. cit.*, pp. vii—ix. So we can take the incidents (including the journeys) in the *Acts of Thomas* (c. 220) as reliable.

It is by doing so that we may affirm that St. Thomas came to Gundaphar's (Gondophares') city in the Punjab, N. W. India, whether or not he went to 'Parthia' as tradition recorded by Origen in his *Comm. on Genesis*, written between 228 and 231 A.D., says, and even if the 'Parthia' of his tradition (*paradosis*) be not the territory of the Indo-Parthian king Gondophares of Taxila (A.D. 19 to 55...). While preaching in that city and its neighbourhood for some time the Apostle (adds the *Acts*) went by land in a bullock-cart to Mazdai's kingdom, and was, after a short period of evangelistic work, martyred at that king's command, by soldiers (and not by a priest or fowler). We take this short and last land journey (and not a voyage in a boat or ship) as having been mentioned in St. Thomas' final letter to Edessa, and therefore, reliable. That means that he died somewhere near (perhaps to the west of) Taxila, and therefore in N. W. India itself. So neither the *Acts* of c. 220, nor Origen, c. 230, tells us anything about Malabar, or about any religion there. *Pace* Dr. Medlycott (*Thomas*, pp. 260-61), there is in the *Acts* no "detail...peculiar to Southern India" (*ibid.*, p. 277), nor any South Indian name like Damirike, Kerobothras, Muziris, Purrhon Mountain, Nelkynda, etc., all these being names found in writings of the first or second century A.D. (Of these Muziris and Nelkynda, i.e., modern Cranganore and Nāḱkida, practically Niranam, are localities in which St. Thomas is said to have set up crosses and built two of his 7 or 7½ Malabar churches). (See Postscript 3).

## XVI

On the other hand, if we agree with Dr. Burkitt and Dr. Sylvain Lévi in regarding the *Acts* as unhistorical, there will be no documentary evidence at all for the existence of Christianity anywhere in India in St. Thomas' days. Dr. Burkitt even affirms that the name Gundaphar of the *Acts* has only the same historical value as Ahasuerus in *Esther*. See his article on St. Thomas in *Ency. Brit.*, last two editions. Prof. Sylvain Lévi (in his letter to the



present writer, dated 29th April, 1927) said.... "you are right in denying any historical value to local legends" (of South India) "which have nothing to bring to their support." (Vide XX for a *first century* Tamil chronicle from Niranam in Travancore, and a song 'of 1601 A.D.' based on it). Lévi continues: "What is known from early books points only to North-West India, and no other place, for Saint Thomas' apostolic activity and martyrdom. This is, of course, mere tradition too, no real history." (But see XV). (Levi's letter was published in *The Young Men of India* (Calcutta) for July 1927, p. 402).

Apart from documentary evidence, there is no archaeological evidence for Christianity in India in the earliest centuries, the Taxila cross and other crosses dug up in N. W. India being of uncertain date. For instance Seals No. 108 and 528 b on Plate CXIV in Vol. III of Sir John Marshall's *Mohenjodaro* show crosses which are undoubtedly pre-Christian, probably of the 4th millennium B.C. Again, pre-Christian crosses of the 3rd and 2nd century B.C. appear on cast coins also. Vide Allan's *Coins of Ancient India*, Brit. Museum, 1936, Plate XXXV. Another pre-Christian cross, a small red one on white background, on a piece of carnelian, dug up at Taxila, and estimated to be of the 3rd century B.C., was in 1946 presented by Major-General Sir Gordon Jolly to the Indian Red Cross Society.

But the small, equal-<sup>limbed</sup>~~armed~~ Taxila cross turned up by the polugh in a field on the borders of Sirkap in Taxila in 1935 (Sirkap was Gondophares' new city) may be assigned to the period after the vision of the cross-sign in heaven by Constantine in 312 A.D., or rather after the 'Invention of the Cross' by his mother in 326. It is of dark stone of the same geological nature as that used for small trinket-boxes believed to date "from the 1st to the 3rd century A.D." Unlike the other crosses this has a hole at the tip of its upper limb, which very probably indicates that it was worn as an ornament, or a religious symbol. Though Malabar claims that St. Thomas set up seven <sup>or 8</sup> crosses, the cross did not come into vogue among Christians elsewhere in the world in the 1st-3rd century.

## XVII

We may hold that there were Chistians in Afghanistan, Baluchistan, and the parts of India adjacent to them in about 196 A.D. For Bardaisan (d. 222, converted 179), of Edessa in his *Book of Fate*, also called *Book of the Laws of Countries*, contrasts the habits of Christian and pagan Kaishānāyē (i.e., Kushans), Persians, Parthians, and others. Vide Mingana's *Early Spread... in India*,

p. 16. Bardaisan's Kushans are probably those in the Kushan empire of N. W. India, Afghanistan, and the regions beyond, which lasted from about 50 A.D. to about 230 (if as Sir John Marshall says in the *Journal of the Royal Asiatic Society*, 1947, Pt. 1 & 2, p. 32, ~~Kanishka's~~ <sup>the Kushan</sup> era began in about 128). The Christians among them were probably the descendants of those converted by St. Thomas or his disciple Gondophares (A.D. 19-55....) and other Indo-Parthian and Indian Christians of N. W. India conquered by the Kushans in c. 50 A.D.

Most probably there were Christians in this Indo-Parthian region, both among Parthians *and Indians also* in c. 196, before Adda, Manes' disciple perhaps visited them in about 317 as supposed in IX ante. But the *Book of Fate* does not mention the customs of the *Indian* Christians (of c. 196) among the Indo-Parthians and the Kushans of India, probably because by that time they had adopted Persian, Parthian, or Kushan dress, speech, etc., and Bardaisan could not distinguish them in Edessa <sup>or Seleucia</sup> from the true Persians, Parthians, and Kushans. The features of those Indian Christian visitors to Edessa <sup>or Seleucia</sup> for ecclesiastical purposes, or on business, as well as their complexion, must have been like those of Parthians, Persians, Greeks, and Kushans owing to about two centuries' miscegenation subsequent to long-time mixture with Persians, Greeks, and other white people in N. W. India. Near it was 'White India.'

Quintus Curtius says: The men of North India "cover their persons down to the feet with fine muslin, are shod with sandals, and coil round their heads cloths of linen....The beard of the chin they never cut at all, but they shave off the hair from the rest of the face, so that it looks polished."—(Alex. 8, 9: McCrindle's *Ancient India*....*Alexander*, p. 188). Accordingly in the *Acts* (c. 220), Act 8, we find Karish taking the *turban* of one of the servants, and putting it round the neck of St. Thomas, and ordering them to drag him along to King Mazdai of N. W. India. Turbans could not have been in use then in *South India*. (Mingana, *op. cit.*, p. 16, however, sees no Christians among the N. W. *Indians* in c. 196).

## XVIII

From this Kushan-Parthian region of N. W. India Christianity could possibly reach the chief ports and marts of the West Coast down to Malabar, Cosmas' Male (two syllables), and some of the chief cities in the adjoining Andhra empire (which seems to have come to an end about 225 A.D.), and thence reach the Madras Coast. All this could have happened before 317 A.D., the date of

the coming of the Baghdad preachers of '*rauravam*' (li *supra*). But it is impossible to adduce evidence for it, as for the existence of St. Thomas' Christians, or other Christians in South India in the days of the *Doctrine of the Apostles*, c. 260, quoted below.

### XIX

The *Doctrine*, which according to Dr. Burkitt (*Kerala Society Papers*, Series 6, Trivandrum, 1930, p. 287, col. 1 of his article 'St. Thomas and His Feasts') 'may be safely dated in the 3rd century A.D.', informs us that "India and all its own countries, and those bordering on it, even to the farthest sea, received the Apostles' hand of priesthood from Judas Thomas, who was guide and ruler in the Church which he built there, and ministered there."

### A

By 'India' the author means, of course, India of Gundaphar and Mazdai already assigned to St. Thomas in the Acts of c. 220, although Alexandrian tradition called it 'Parthia' in the same period (c. 230). India of the Acts and the *Doctrine* (c. 260)—both Edessene works—is the Indus region, and cannot be interpreted as the whole of modern India from the Himalayas to Cape Comorin, even though in those centuries Greek and Latin writers did call the whole land (*plus* even regions to the west of the Indus and to the east of the Ganges, as Ptolemy, c. 150, did) 'India'. So '*India and all its own countries*' are the Indus region of the Parthian Gondophares, and of the Kushans and others who ruled over that region later up to the time of writing the *Doctrine* (c. 260), the land comprising as '*its own*', several countries from Kashmir down to, say, the Kushan Satrapies of Maharashtra and Malwa. There may have been Christians in that vast region in c. 260, and the author may have had information about them, but not of people in Malabar.

### B

'The farthest sea' is most probably the Arabian (Erythrean) Sea, which Philostorgius (A.D. 423) designated '*the farthest ocean*,' or '*the outer sea*.' See Medlycott's *Thomas*, pp. 189, 194, and 201. The Syrian author of the *Doctrine* had very probably the Biblical notion that South Arabia was at the remotest end of the earth. For in Matthew 12:42 (c. 100) we find Christ speaking of Sheba (=Arabia Felix, now El Yemen), the land of the Queen of the South, as at '*the very ends of the earth*'. And

Josephus in his *Wars of the Jews* (revised in Greek, 93 A.D.) speaks of the Arabians as 'the remotest Arabians'. Again, Tacitus in his *History* (Bk. V, ch. 6) says: '*Terra finesque, quae ad Orientem vergunt, Arabia terminantur*' (= 'the land and the ends which lie towards the east are terminated by Arabia'). As we saw in XII ante, the tradition about Pantaenus (who came to South Arabia) was that he went 'as far as' the Indians. So the sea laving South Arabia could, quite naturally, be called 'the farthest' or remotest sea at 'the very ends of the earth'.

We can concede also that ancient writers regarded, or could regard, other seas as the farthest. For instance—

1. Hecataeus of Miletus (born c. 540 B.C.)—(a) the Atlantic Ocean at the Pillars of Hercules, and (b) the Bay of Bengal.
2. Herodotus of Halicarnassus (c. 484—425 B.C.)—the Bay of Bengal.
3. Pytheas of Massilia (c. 300 B.C.)—the sea lying north of Great Britain, and laving 'Ultima Thule' of the north.
4. Eratosthenes (276—196 B.C.)—the Bay of Bengal.
5. Ptolemy (c. 150 A.D.)—the China Sea.

But the question is whether the Edessene author of the *Doctrine*, c. 260, had any chance of taking one of the above seas as the farthest. It is most probable that by 'the farthest sea' he meant the sea laving Arabia.

And as a matter of fact we find not only Christians, but also bishoprics even in 225 A.D. in and near South Arabia called 'the very ends of the earth'. For instance in—

1. Baith Katraye, the Arabian region on the west coast of the Persian Gulf;
2. Baith Lapat, the metropolis of the above;
3. Hormizd—Ardashir, the town of Ahwaz on the Karun;
4. Pherat de Maishan (Basrah);
5. Baith Huzaye (Khuzistan);
6. Fars, east of the Persian Gulf; and
7. Arabia Felix, Arabia Magna (South Arabia), visited by Pantaenus in 189—90. (*Vide* Mingana, *op. cit.*, pp. 13, 58, 59, 61, 63—64 for all the above.)

Moreover, we find about 780 A.D., from Bar—Hebraeus (1246—86) that "the bishops of the province of Fars....used to

say, We have been evangelised by the Apostle Thomas".—Mingana, *op. cit.*, pp. 34-35. They used to say so from St. Thomas' days, he means. Did S. India say so in that period?

Some 250 years before, the Syriac work *Acta Maris* (c. 520) speaks of St. Thomas' odour (tradition about martyrdom) as having been extant in Fars. Mari (1st cent.), Bishop of Ctesiphon, after having preached in Baith-Huzaye (Khuzistan), north of Fars, 'went down to the southern countries until the odour of Thomas, the Apostle, was wafted to him; and there also he brought a great number of people to the Lord'.—(Mingana, *ibid.*, p. 29; Medlycott, *Thomas*, pp. 36-7). In 'the southern countries', i.e., in the southern parts of Khuzistan, or on the <sup>northern</sup> borders of Fars, he heard the fame of St. Thomas and his martyrdom in N.W. India being talked of. 'Odour' perhaps indicates martyrdom; and its tradition spreading from the Indus region to Fars alone and no further would mean that he preached also in those South-Western parts of the Parthian empire.

In c. 230 Origen heard the tradition about St. Thomas' preaching there, and so it was that he recorded that St. Thomas went to *Parthia*. Of course, this Parthia has been explained otherwise also—as the Parthian Gondophares' region, which also perhaps was meant by the tradition.

We think that St. Thomas met Habbān in Fars, and sailed with him to 'Sandaruk', which we interpret as Alexandria founded by Alexander the Great among the Oritae in Baluchistan. Vide IX *ante*, and *Camb. Hist. of India*, Vol. I. In St. Thomas' Aramaic letter this Alexandria was probably truncated, and *uk* was added. Thus 'Alexandria', or rather 'Alexander—*oikos*', or—*oikia* (Greek, meaning Alexander's 'house'; Syriac *baith*, Hebrew *beth* as in 'Bethlehem') became 'Sandaruk'. *Uk* in 'Sandar-*uk*' may, in the alternative, be a word or suffix of the language of the Sandarukian Oritae. Shortening was usual in Semitic and Indian languages. 'Constantinopolis' has become 'Istambul', for instance; and 'Alexander' has several curtailed forms in Semitic ('Sikandar', 'Iskandar', etc.), and Indian languages ('Alasanda', northern and 'Ālak', 'Chāndy', 'Ökkānda', etc., southern).

While equating Sandaruk with 'Alexandria among the Oritae', we are not unaware that Dr. Farquhar and others have identified it with Andropolis in Egypt, and with other places like Cranganore. In the Greek translation of the 4th century 'Sandaruk' appears as 'Andrapolis'—(Ale<sup>k</sup>-) *sander-uk*=*Andra-polis*.

As shown in the previous paragraphs of this section (B) there were Christians and bishoprics, very early, perhaps, in the whole region to the west of the mouth of the Indus, up to 'the farthest sea' laving 'Arabia Magna', i.e., South Arabia. But we find no mention of Christians or bishops in c. 196 in the parts of India other than the N.W., where they probably continued to exist in 225 and c. 260 A.D. So the *Doctrine's* 'countries bordering on India and all its own countries' would be those along the seaboard of 'the farthest sea' (the Arabian) from the estuary of the Indus to Arabia, including Fars, which in c. 780, and before, used to claim *evangelisation* by St. Thomas.

## C

It does not, however, mean that *all* the countries along that region were *evangelised* by St. Thomas himself. The *Doctrine* says only that they 'received the Apostle's *hand of priesthood* from Judas Thomas', i.e. the imposition of hands for Apostolic succession, and not the Gospel (evangel). The hand of priesthood could be received *directly* from him (e.g., in Gundaphar's and Mazdai's regions, and also in Fars); or *indirectly* (in other parts) after his martyrdom, by the imposition of the hands of those on whom he had laid his hands while in Fars and the upper Indus region (but not in Sandaruk).

## XX

In XVI *supra* we mentioned a first century Tamil chronicle recording the details of St. Thomas' work and death in *South India*. It is in a Malayalam song on St. Thomas, said to be of 1601 A.D., and generally known as 'Thomas Rampān's song', first published in 1916 that we find the chronicle ('*charitam*', history) revealed as the source of the incidents and dates (Dec. 50, Dec. 51, Sept. 59, April 69, 84 minutes before sunset on 3rd July 72 A.D., etc.) relating to the Apostle. Rampān (= 'monk') had the 1st cent. chronicle before him while composing his song 'of 1601.'

But the existence of the song 'of 1601' before 1892, and of the '*charitam*' of the first century *at any time* during these 1900 years, has not been proved by their Malabar supporters, or by European authors like Bishop Zaleski (1912), Fr. Rocca (1938), Fr. H. Hosten (after his article on Thomas Cana in *Indian Antiquary*, 1927, Vol. LVI, pp. 180—182, with the present writer's objections), Dr. Farquhar (1926-7), and Fr. H. Heras (1944), who unhesitatingly used the song in their works.

We cannot but regard the first century *charitam* and Thomas Rampān's song based on it as spurious, although the song (*wrongly* called 'Thōmmā Parvam' by some writers) has been given wide publicity through Fr. Rocca's Italian translation (*La Leggenda di S. Tomaso Apostolo*) inserted in *Orientalia Christiana*, Rome, xxxii, No. 89, 1938, pp. 169 ff. In 1912 Bishop Zaleski published extracts from the song under the name *Carmen Thomae Ramban*, but Bishop Medlycott (1905) had ignored it.

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*Postscript 1:* About Adda of IX ante Dr. W. B. Henning of Cambridge tells me in his notes dated 3rd March, 1948, thus: "The statement, in the *Acta Archelai*, that Adda was Mani's apostle to the East, has been disproved by the discovery of the original Manichaean Missionary History. ——— The suggestion that the original text of the Acts referred to a nation Oritae —'—— is put out of court by reference to the text" in Latin, which was "translated from the Greek text." In both "there is nothing but 'East,' no Oritae"—Greek "*anatolēs*," Latin "*Orientis*" in the translations above.

If the Syriac original, lost, had Oræ, or some other strange form, the translator finding no such Syriac word, could possibly take it as *ūrīn* (=the east) borrowed from Hebrew, and translate it as above.

Did no Manichaean missionary come to St. Thomas' East, i.e., N. W. India? The Gnostic *Acts of Thomas* is said to have been "used by the Manichaeans," says Medlycott (*Thomas*, p. 215, 3). Ammo went towards Balkh.—T.K.J.

*Postscript 2:* The Latin author of *Itiner. Alex.*, 345 A.D., says: "India taken as a whole ——— is a continuation of Egypt and the Ethiopians." (McCrindle, *Ancient India* ——— *Classical*, 1901, p. 153).—T.K.J.

*Postscript 3:* Marquart has identified Mazdai with Gōdarz II (A.D. 39-51?), Wizan with Bēshan, and Manashar with Manēshak = Manēsha. See *Bulletin of SOAS*, XII, 1, ante, p. 25, n. 4. All 3 are Parthian names, and not S. India.—T.K.J.

# THE JOURNAL OF INDIAN HISTORY

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Vol. XXVIII, Part I

April 1950

Serial No. 82

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## Constantine and Indias

BY

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### 1. MALABAR

Malabar Hindu documents about the Christian king Pallivāṇavar (317 A.D.), of Cranganore, Malabar, were dealt with in this *Journal* for April 1948, (pp. 27 — 44). Was he one of the kings who sent to Constantinople (founded in 330) an embassy to Constantine the Great in 336 — 7 ? That emperor was then well-known, and even worshipped in our India (as in Italy, North Africa and other places.) For Eusebios (ca. 325) in his *Greek Life of Constantine IV.* 50 (Ed. Migne, 1857) says :—

“ At the same time (that is to say, when the marriage of him, the Emperor's son, took place) arrive there the Delegates of the Indians who live in the East (Eastern regions), carrying with them gifts, many kinds of pearls of great effulgence and price, and beasts of peculiar shape and character, which differ from those of ours. While offering all these to the Emperor, the delegates stated, first, that his empire was extended as far as their own ocean, and, secondly, that the princes of the Indian people recognise him as their King and Emperor by erecting painted tablets and statues in his honour. And as in the beginning of his reign the Britains, who live in the western ocean were the first to subject themselves



to his reign, so now the Indians who live in the East do the same" <sup>1</sup>

"They told him too of pictures and statues dedicated to him by the Princes of India", says Priaulx in his *Apollonius*, 1873, p. 181. The original Greek given by him (p. 180) has *eikonōn graphais*. These icons must have been set up in temples erected mainly on the W. and E. Coasts (rather than the interior of India), and in Ceylon. There were then in India and Ceylon, traders from Greece, Asia Minor, Alexandria of Egypt, and from other parts of the Roman empire, who used to worship the Roman Emperor as divine. To the Hindus the divinity of the king was no novel idea, although after his conversion to Christianity Pallivāṇavar must have (in obedience to Christian and Jewish doctrine) discouraged the worship of icons, as King Gondophares of the Panjab, St. Thomas's convert, had preferred the title "*Deva-vrata*" (= devoted to God -- singular) to the then usual titles "*Deva-putra*, and *Dēvānām priya*" (= son of god, and dear to the gods — plural), and also adopted what historians call his "*characteristic symbol*" — viz. a small v surmounting a large circle ○ standing on an inverted capital T (⊥) as its base. The three combined looks like a big wine cup (chalice), such as the chalice used by Christ at His Last Supper with His 12 disciples, and ever after that by all Christians at the Eucharist. St Thomas celebrated the Eucharist in the Panjab as *The Acts* (ca. 220 A.D.) tells us. And the chalice, and not the cross, is the earliest known Christian symbol. See *Ency. Brit.*, s. v. Chalice, & *Drinking Vessels*.

The cult of the divine Roman Emperor ("*Caesar, Divi Augusti Filius Augustus, Imperator*") had perhaps been prevalent in

1. Here we recall that about 350 years before, i.e. ca. 25 B.C., Poros and the Pandyan king whose territory extended, in the days of the *Periplus*, ca. 60 A.D., to the south of the Chera's, and had on the West Coast the sea-port Bakare (Purakkād), and the Pampa river port Neakynda (Nākkida) — see this *Journal* for Aug. 1948, pp. 122-4, Nos. 11-13 — sent Embassies to Caesar Augustus. They reached the Emperor at Samos in 22 or 20 B.C. according to Dion Cassius (194 A.D.) via Antioch in Syria, where Nikolaos Damaskenos personally met the survivors (three) of the combined embassy. Strabo's words (ca. 5 A.D.) —

kakeithen o' aph' henos topou kai  
par henos basileōs Pandionos  
kai allou Pōrou (or ē kat' allous)

are usually taken to refer to one embassy. But it seems that the Pandyan's starting from Bakare port joined the North Indian Poros' embassy at Broach and both sailed on together.

Cranganore, Cochin, since the days of Augustus, whose temple in Cranganore seems to be mentioned in *Tabula Peutingeriana*. In 333 A.D. or later a cult of the *Gens Flavia*, the Emperor's family, was established by Constantine at Hispellum (Spello), and it spread to Africa. The above Malabar temple of Augustus might have (as in Rome) enshrined an icon of his, or in later days a serpent also. For the Greeks and Romans believed that the souls of the dead were incarnate in the bodies of serpents and revisited the earth in that form. And the Romans used to keep serpents in every household, as the Hindus kept, and even none keep, the images of serpents, and in some cases, live serpents in their houses. (Vide Frazer's *Golden Bough*, 3rd ed. IV. 74.)

## 2. THANA

Now, "in the year 1564 at the town of Tana of the Island of Salsete, near the city of Baçaim in India" (= Bassein, Bombay), there was accidentally dug up "a statue, which being cleaned and examined, showed perfectly in the dress and make of a Dominican Friar," supposed to be Bishop Jordanus of ca. 1330. This was a statue "of black wood, one palm high, and held its hands under the scapular; the hair reached the middle of the head," according to *Or. Conquistado* (1650 A.D.). But *Catholic Encyclo.* IV, 610c. says it was a bronze statue. Was this perchance a statue of Constantine?

## 3. METRODORUS-CONSTANTINUS-CONSTANTIUS

Cedrenus of the 11th century says of one Metrodorus that "he was a Persian-born and pretended to philosophy; that he travelled to India and the Brahmins, and made for and introduced among them water-mills and baths, - - - (from their temples) he stole pearls and other precious stones. These jewels, together with others - - - for the Roman Emperor, he offered to Constantine as gifts from himself, and gave him to understand that the Persians had seized and appropriated a parcel of other jewels which he had sent overland. On this, Constantine wrote curtly to the Persian king, and receiving no answer, put an end to the peace between them." (—Priaulx, *op. cit.*, p. 182).

But Ammianus Marcellinus (361 A.D.), a contemporary, in defending Julian (born 331) against those who charged him with having instigated the Persian war (of 357, and not of 336-7 A.D.), asserts that it was brought on by Constantius II (317-361), who too

rashly gave credit to the falsehoods of Metrodorus. So the presents must have been given to Constantius (317-361), and not to our Constantinus (died 337). Cedrenus appears to have read the emperor's name wrongly.

The India to which Metrodorus came in or before 357 may or may not have been our India. But the "ulterior India" that he had (acc. to Rufinus) visited before 326 (say, about 320 A.D.), and before the visit to that India by Meropius and the boys Frumentius and Edesius in Constantinus' days (as Rufinus says) was Ulterior Arabia west of Parthia. Pace Priaulx (pp. 183-4) we do not regard Rufinus' and Marcellinus' Metrodoruses as *two* different persons, but as *one*, who (according to the dates found in documents) flourished from about 315 to 357 A.D., and visited both Arabia (miscalled India) and our "India of the Brahmins," also distinguished from other Indias, the pseudo-Indias west of the Indus, as India "Orientalis," India "which makes an end," or India "in the confines of the world."

#### 4. CONSTANTINE AND THEOPHILUS THE INDIAN

The Arian Philostorgius (*H. E.* III, 4: Photius' *Bibliotheca*) says that Theophilus was born at Dibous, an island of the "Indians," that when very young he was sent by his people (the Indians: the Blemmyes) as a hostage to our Constantine, and was educated in a monastery (at Nicomedia?). Later on Constantius, the next emperor, in about 354, sent him as an Arian missionary to the Sabeans of South Arabia and to Abyssinia. Several authors have regarded Theophilus as a real Indian, and identified his Dibous with Diul off the mouth of the Indus (by Valesius, Shrockh, and Assemani), the Maldives (by Gibbon), Socotra (by Moberg), Diu, or Saka-Dveepa, the estuary of the Indus (both by myself).

But Priaulx (*op. cit.*, p. 188, and notes 41 and 43) says that "Theophilus is often called the *Blemmyan*, and his mission points to an Arabian origin, and I incline to think that Dibous is some Arab island or promontary connected with the Debai or Dedebei of Agatharcides" (146 B.C., *ibid.* p. 248). Is Dibous Jibuti?

The above mentioned Blemmyes were "a fierce people whose heads once did grow beneath their shoulders (Pomponius Mela I, viii, 60) (who) infested the neighbourhood of Berenice --- (and) seem to have occupied Coptos and Ptolemais, for Probus (A.D. 279) is said to have recovered these towns from them." (Priaulx, pp. 166-7). Berenice and Ptolemais were on the African shore of the Red Sea, and Coptos, N. W. of Berenice, was on the Nile.

After pointing out Theophilus' founding churches among the Homeritae of South Arabia, his going even to the mouth of the Persian Gulf, his visit to his own "Dibous and other parts of India", and his work among the Ethiopians living at the entrance of the Red Sea, and finally his return to Rome from Auxume in Ethiopia, Priaulx asks: "Does not all this show mere travel in Arabia up to the Persian Gulf and the Red Sea?" And we now know for certain that the Ethiopians and South Arabians were wrongly called Indians. E.g. Pseudo-Kallisthenes, 4th cent., calls the king of Ethiopia an Indian, Aphrahat the Syrian (275-345 A.D.) calls the Ethiopians Indians, and *Itiner. Alex.* (345 A.D.) regarded India as a whole as extending eastwards from Egypt and Ethiopia.

### 5. A THEBAN SCHOLAR IN CRANGANORE

We may here note that some time after Theophilus' travels in S. Arabia and Ethiopia, a Theban scholar, a lawyer, came by the Red Sea to "India," i.e., to Ethiopia and South India. At Auxume, the capital of Ethiopia, "he met with some Indian, i.e. Arab, merchants about to proceed for India: he joined them, and together they crossed the Ocean. After several days' voyage they reached Muziris, the chief port on this side of the Ganges and the residence of a petty Indian rajah" (a successor of our Pallivānavar of the first half of the Constantinus-Constantius-Julianus century.)

At Muziris he stayed some time studying its soil and climate and the customs and manners of its inhabitants. But if he narrated or wrote anything about Pallivānavar and other Christians there it has not survived. There he "heard of the Ceylon markets thronged with merchants from Ethiopia and Persia," i.e. Arabs and Persians. Some of them must have been found by that scholar in Pallivānavar's Muziris too, and the Baghdad missionaries who had come to Pallivānavar in 317 were Syrians or Persians from the Baghdad region. See this *Journal*, 1948, pp. 27-29.

The explorer then penetrated into the interior of the country and got as far as the Besadae, a dwarfish, large-headed people who occupied themselves with gathering pepper from the low and stunted trees on which it grows. "*Piper ibi nascitur in magnâque colligitur copiâ*" — in Malabar, and not in Ceylon, as the Latin account wrongly suggests.

The Besadae seized on the poor scholar, and their king gave him as a slave to a baker. I think he was not one of the "Besadae," but a civilized "baker" from near Muziris who used to barter salt, food, and sweet-meats for pepper and other forest produce.

"With him I stayed six years, and in this time learned their language" (= Tamil of Cochin) "and a good deal about the neighbouring nations. At length the great king of Ceylon<sup>2</sup> heard of me and out of respect for the Roman name and fear of the Roman power" (known in Muziris from at least the days of Palli-vānavar and the embassy of 336-7) "ordered me to be set free, and severely punished the petty rajah (of the Besadae) who had enslaved me." The king of Ceylon had no authority over Malabar to issue such an order.

The name Besadae does not appear in the Latin version of the Theban's report, but in the Greek original it appears also as Thebaidas, Bethsiads, and Bethsads, all likely to be wrong renderings of the name of some Travancore-Cochin forest tribe like the Veda or Veshava, confounded with the Tibeto-Burman "Bisadae", of whom the scholar had the chance of reading in the Greek works of Pseudo-Kallisthenes (III, 8: "Bisadae", clever climbers and leaf gatherers), or in the Periplus (§ 65: "Besatae", gatherers of "malabathrum" = *tamāla-patram*, cinnamon leaf).

## 6. CONSTANTINE AND QALONYA

Archbishop Severus of Antioch (512-39 A.D.) mentions the following incidents about "the merchant Qison, a fire-worshipper, who coming to Qalonya, in the country of the Philippos, somewhere in India, made the acquaintance of the Christians there and of their bishop; he goes home by sea and brings his family to the bishop for baptism. He goes home again, and dies. His widow, Helena and her four sons, John, Stephen, Joseph and Daniel, come to "India", to the capital of a king where there are no Christians. So many miracles happen on their account that John and the king write for a bishop to Constantine the Great. John, bishop of Ephesus (sic), comes to "India", baptises the king and his people, and consecrates John, one of the four brothers, as first bishop of that city."—See *Indian Antiquary*, 1928, p. 120, and 1927, pp. 150-151.

2. This cannot be Ceylon, because the king of that island had no authority over the king of Muziris to order the latter to set the Greek scholar free. Ceylon, therefore, must be the result of the wrong reading by the Latin translator of the Greek version, of either (a) *cēram* = Kerala, or (b) *cigalam*, *sigalam*, *cingli* which are some of the forms of the long name *Tiruvan-cikalam*, found in European and W. Asian documents. It was the name of the Cera king's capital, Muziris being a river-port of his.

Is the India in the above passage our India? If the country of the Philippos is that of the Apostle Philip's Christians it cannot be in our India, but may be Phrygia assigned to Philip by some writers. Then Qalonya cannot be Quilon in Travancore, or Kalyana of Bombay or Kalawan (= Kalamina of St. Isidore, d. 636 A.D.) of the Panjab.

Let us note that Dio Chrysostom, Plutarch's contemporary, describes a "happy India" ironically in *Celaenis Phrygiac Orat.* XXXV, II. In his oration to the Alexandrians, the *Celaeni* (II, 72) are mentioned. There was a place called *Celaene* in Phrygia.

If after their baptism in Qalonya of Phrygia the widow Helena and her four sons came (from Persia) to *another* India, whence the son John, wrote to Constantine for a bishop, it may have been Muziris (in Cochin), or some other place in India proper that they visited.<sup>3</sup>

3. Recent excavations near Jerusalem in ancient Judea have revealed (1949) the remains of a city close to Kolonia, which name looks like Qalonya above mentioned. Judea's old spelling was *Iudea*, in which form it had every chance of being wrongly read as *Indea*, and construed as *India*. Kolonia is believed to have been "built by the Roman legion when it conquered Palestine," - - (and) "the scene of many fierce battles." Kolonia may be Latin *Colonia*, colony.



## ‘India’, a Continuation of Egypt and Ethiopia

### *A Résumé*

BY

T. K. JOSEPH, B.A., L.T.

~~Trivandrum~~

### I. INDIA — ARABIA

Apropos of Fr. Perumalil's Rejoinder "Citerior India" in *Jili* for August 1948, the following *fresh* passage from *Itinerarium Alexandri*, a Latin work of 345 A.D., written for the emperor Constantius (317—361), i.e. of about the year of the birth of Rufinus (born 340—45, baptized c. 370, died 410 A.D.), has also to be considered by scholars interested in the study of the pseudo-Indias and pseudo-Indians of the ancients. I came across the passage on 5th May, 1948, and brought it to the notice of scholars by publishing it in *The Examiner* (Bombay) of 22nd May, p. 315.

The *Itiner. Alex.*, 110, says: "India, taken as a whole, beginning from the north and embracing what of it is subject to Persia, is a continuation of Egypt and the Ethiopians, and is on every side hemmed in by the ocean—that interfluent sea of Hippalus, from which branches off the gulf which shuts in the Persians. Under this name of India is comprehended, you must know," (Constantius, and other readers) "a vast extent of country which breeds a great multitude of races of men, and especially of gigantic beasts, such as elephants and acre-long snakes; for in comparison with these, leopards, lions, or even tigers are tame."—(McCrindle's *Ancient India --- Classical*, 1901, p. 153).

The Ethiopians here is the land of the Ethiopians, viz. Ethiopia. The portion subject to Persia was N. W. India and its western neighbourhood, and also Carmania and some other parts of Persia. For Philostratos of Lemnos, born prob. in 172 A.D., flourished about 230 A.D., refers (in his *Life of Apollonius of Tyana*) to the Carmani of Persia as "an Indian race, and civilized", and to the pearl-diver of "Balara, ---, a mart for myrrh and palms", west of Carman in Persia as "the Indian diver." (See Osmond de Beauvoir Priaulx's *Apollonius*, 1873, p. 55). "From the north," i.e., from the Himalayas. The ocean is the Erythrean Sea of



Hippalus and the Bay of Bengal combined, and not Oceanus, the Atlantic, which the ancients regarded as surrounding the old world. "On every side"—except the north; on the other 3 sides were the Red Sea, the Indian Ocean and the Bay of Bengal. The gulf is the Persian Gulf. "Races": those of the Indian sub-continent, formerly called the Ethiopians of the east (e.g. by Homer, Herodotos, and Ktesias), and also the Carmanians, etc. of Persia, and the races of Arabia. In the days of the author, c. 345, the Ethiopians were called Indians, e.g. by Aphrahat the East Syrian (275—345), and as Fr. admits, by Pseudo—Kallisthenes (4th cent.), and later, Procopius (6th c.), both Greek writers.

The author of *Itiner.* implies, it is clear, that India as a whole, part of which he exhorts Constantius to wrest from Sapor of Persia, extends from the Red Sea to the Bay of Bengal, and includes Arabia and the lower portion of Iraq—Iran, and Baluchistan—Afghanistan, as well as the sub-continent south of the Himalayas. McCrindle did so understand him. For in a footnote he says: "Our author was perhaps betrayed into this astounding error by the fact that the name of India was often, in his time, applied to the regions along the Red Sea lying to the south of Egypt. Geographical science had entered on its retrograde course even before his time." Yes, not to mention the distant Phoenicians, Syrians, Hebrews, Greeks, and Latins, even our neighbours the Persians had pseudo-Indias west of Persia. See my 'Citerior India' in *J I H* 1947, pp. 176—180, 183-4, and 187.

## II. FR.'S ALL, MINUS ITINER. 110

Even though Fr. contends that he "examined the Greek and Latin authors from the 5th century B.C. till the 13th century A.D.", and *thoroughly and completely* examined *all* such authors of "9 centuries, i.e. 326 B.C. to 641 A.D.", he *does not appear* to have seen the above passage from *Itiner.* For in *The Examiner* of July 10, p. 401, he says that the above passage of 345 A.D. "does not appear to be" from "a *Latin* contemporary of Rufinus" (340—45 to 410 A.D.), because "the manner of narration is typical of a writer of the Middle Ages" (about 1000—1400), long posterior to 345. No unbiased reader can interpret the passage differently, and assert that the India continuous to Egypt—Ethiopia is only India proper, the Indus—Himalayas—Ganges—Comorin—Indus India of Fr.'s incorrect conclusion of 1942, still clung to in 1948. There need be no doubt about the date 345 A.D. for *Itiner. Alex.*, for McCrindle says (*op. cit.*, p. 150) that "Letronne has convincingly shown that

it must be referred to the later” of the two proposed dates 338 and 345, against Mai who assigns 338 to the work.

### III. ITINER. ALEX. CUM RUFINUS

Now, collate with the above passage the Latin Rufinus’ “Citerior India *adhaerens* Aethiopia”, occurring in his *Historia* written about 25 years later, and assume that India is his own term. Readers with no pre-fabricated conclusion based on a non-thorough study of all documents, will see that this India “near or attached to” Ethiopia can be only Arabia, and not our India. See this *Journal* 1947, pp. 179—82. Suppose also that the above specification of India as adherent to Ethiopia is not Rufinus’, but Ede-sius the Phoenician’s. Could the India of that ilk—an India adherent to Ethiopia and situated between Ethiopia and Parthia—be possibly our India ?

### IV. FR.’S CHALLENGE

Fr. challenges me to show from clear Greek and Latin texts prior to the 7th cent., and not ambiguous or indifferent, that there were Indias in Africa and Arabia. Neither I nor the scholars in Philadelphia, N.Y., Chicago, London, Birmingham, Manchester, Cambridge, and Edinburgh, whom I consulted have come across a text of that sort. Has not Fr. found such a text during his “thorough and complete examination” of all the Greek and Latin authors of the period ? Or, has he unwittingly skipped such a passage on Arabia, as he overlooked that of 345 A.D. cited *supra* ? Or, has he wrongly interpreted such a passage, as he has given the *wrong* sense of ‘projecting much in the direction of’ to *adhaerens* (= near, or attached to) in Rufinus’ “Citerior India *adhaerens* Aethiopia” ?

Let us provisionally concede that there is no clear Greek or Latin statement that ‘*Indiam omnem plagam Arabiae accepimus*’ = we take as India all the regions of Arabia (like Mar John’s Syriac sentence about the name India applied to Ethiopia). The passage of 345 A.D. from *Itiner.*, and Rufinus’ phrase “Citerior India *adhaerens* Aethiopia” will prove amply that Arabia was called India in the fourth cent. A.D., if they are not wrongly interpreted. See also the presumptive evidence set forth in this *Journal* 1947, pp. 183-4.

### V. INDIAS OF GREEKS AND LATINS

Fr.’s alleged thorough and complete examination of Greek and Latin works (*not all*, but only 139 *plus* 217 tomes, *plus* several

classical works from the 5th c. B.C. onwards, an imposing number 356 *plus*?, *minus*, unfortunately, the tiny little passage of 345 A.D.) resulted in his conclusion that in *all* of them India connotes our India. But my examination of the relevant portions of Herodotos, (c. B.C. 450), Strabo (c. B.C. 24 —c. 21 A.D.), *Periplus* (c. 75 A.D.), Ptolemy (c. 150), Rufinus (c. 360) and others, as well as *Itiner. Alex.* (345 A.D.) has led to the conclusion that the semantic content of the term India varied through the centuries from Skylax downwards as follows:—

1. *The Indus region and the Thar Desert.* Herodotos, on the authority of Skylax the navigator, says: "That part of India towards the rising sun is all sand; --- the Indians' country towards the east is a desert by reason of the sands." (III. 98). Onesikritos, the pilot of Alexander's fleet (326 B.C.) says that the country of the Mousikanos in Upper Sindh (not Mūṣika in the southern part of the West Coast of India) "is situated in the most southern part of India."—(Strabo XV. 21). Again, "Alexander who had the chief share in discovering this country" (India) --- "ascertained that the mountainous and northern country" (the Upper Indus region and the Panjab) "was the most habitable and fertile, while the south country" (not South India, but the Thar Desert and the Sindh region) "was onewhere waterless and elsewhere liable to be inundated by the rivers and scorched to the last degree by burning heat, fit enough to be occupied by wild beasts, but not by human beings."—(*Ibid.* 26). Herodotos and Onesikritos seem to have been unaware of, or ignored, the Jumna—Ganges—Brahmaputra region, and the cis-Vindhyan Deccan portion, which were really the easternmost and southernmost parts of the peninsula. Prior to Herodotos India must naturally have signified at first the Indus region to which the western passes admitted the Persians.

The Hebrew Old Testament too does not seem to recognise the regions beyond the "Hodu" mentioned in *Esther* 1:1 and 8:9 (c. 130 B.C.) in the expression "from Hodu as far as Kish" (in Abyssinia). I take this Hodu as a Hebrew corruption of Sutudru (Sutlej), and not of Sindhu (Hindu, Hidu, Indus).

2. *The sub-continent of India (nearly)*, as in Megasthenes (302 B.C.) Eratosthenes, etc.

3. *The above, minus the Scythian region of the lower Indus*, etc., as in the *Periplus*, c. 75 A.D.

4. No. 2 above, plus vast regions west of the Indus, and east of the Ganges, as in Ptolemy (c. 150). For 3 and 4 see this *Journal* 1947, pp. 175-6.

5. Pseudo-Indias, plus No. 2, as in the extracts from *Itiner.* and Rufinus (both 4th c.).

## VI. INDIANS—ETHIOPIANS

In the same century, in c. 375, Epiphanius in his Greek work *Adv. Haeres.* observes that through Berenice Indian wares are distributed by Indian merchants over the Thebaid, and in Alexandria, and Egypt and Pelusium in Roman territory. Priaulx says in *op. cit. supra*, p. 236, that possibly "like the goods the merchants also were 'Indian', i.e., Arabs of either Ethiopia or Eastern Arabia, the Indians of the ecclesiastical writers of this age", like Aphrahat. The reason for the confusion between real Indians (fair-complexioned as in modern times) of the Indus region and of the littoral Western Satraps' region down to the Tapti, appears to me to be the fact that the Indians there (Aryan, and black non-Aryan), *unlike* those of other areas, had long adopted the dress and manners of the foreign rulers of those 2 regions, and changed their features and complexion through miscegenation with the Persians, Syrians, Jews, Greeks, Bactrians, Scythians, Parthians, Kushans, White Huns, etc. from about the 6th cent. B.C. to the days of King Gollas (Mihira-kula) mentioned by Kosmas (c. 525 A.D.). Here we recall that the black Indians of the above regions and other parts of our India were anciently called Ethiopians of the east in the days of Homer (*Ody.* I, 23-24, ca. B.C. 900).

## VII. AS FAR AS—THOROUGHLY AND COMPLETELY?

Fr. claims not only that he examined *all* the Greek and Latin works of 326 B.C. to 641 A.D. (*except* at least the passage of 345 from *Itiner.*), but also that the examination was "thorough and complete," in spite of the limiting phrase "as far as" used by him in the case of 20 writers' works. He leaves it to our readers to judge whether as far as implies that those works "have *not* been examined *thoroughly*" (as I have said).

## VIII. NEITHER THOROUGH NOR COMPLETE

Readers have to consider the following points also:—

1. Fr. has seen India occurring *only four* times in Rufinus' works, of which there are at least ten, as far as I know. But actually there are *six* Indias found in a short extract covering only three pages, from Rufinus' *Historia*. This shows that his examination of

even one short passage cited by himself is not thorough or complete. And even in his present rejoinder (1948) he has not said that 4 is a slip of the pen for 6, 14, 40, or some other number of Indias found in the not-less-than-ten works of Rufinus.

2. Again, there is the term Indians used in Rufinus' works. But Fr.'s Bibliography of 1942 does not record the number of Indians in Rufinus. This also shows that his examination of at least one work, *Historia*, is neither thorough nor complete.

3. In 1942 he gave Rufinus' *adhaerens* the unwarranted sense of 'extending towards'; and I requested him to examine Rufinus' works again and find out whether even that author himself had used *adhaerens* or other words from the same root in the sense proposed by Fr. He re-examined the works and admitted in 1945 that Rufinus' *adhaerens* had not that sense of extending towards. This too shows that his examination of at least Rufinus' several works was not thorough or complete in 1942.

4. He did not see the passage quoted *ante* (Sec. I.) from *Itiner.* of 345 A.D.

5. He wrongly regards the above *Itiner.* as of the medieval period. These two defects also show that his examination was not thorough or complete.

6. In the 18th book of John Malala's Greek *Chronography* (8th cent. according to Fr.) India seemed to him in 1942 "to be Ethiopia and Arabia." That suspicion ought to have put him on his guard. And, showing him later that non-Latin and non-Greek writers had pseudo-Indias and Indians (like the Syrian Aphrahat's Ethiopian Indians, the Syrian Abdias' 2 Indias other than our India, and other pseudo-Indias of the Persians and Hebrews), I requested him to restudy the connotations of the Indias in Greek and Latin works, after classifying them under 3 heads: (a) the author's own term India, (b) India in quotations from non-Greek and non-Latin people's works, traditions, etc., and (c) doubtful instances. But he has not yet published the results of such a restudy. He still wrongly assumes that all Indias (including, e.g., the doubtful instance in Rufinus' 'Citerior India *adhaerens* Aethiopia') in a Greek or Latin work are the author's own term. This assumption has made his examination very defective and unreliable.

7. If, as Fr. claims, he has examined all the (600, or 700 ?) Greek and Latin works of the 9 centuries, why is it that in his

Bibliography of 1942 he has not recorded the number of at least the Indias and Indians in those works? His list of Indias, Indians, Brahmans, Ganges, etc. comprises *only* the names of 42 *ecclesiastical* writers (Nos. 4 to 45, 2nd to 13th century). Surely there are Indias and Indians in other works of the period down to 641 A.D.—e.g. the several *Peripluses*, Ptolemy, *Itiner. Alex.*, Philostratos of Lemnos’ several works, and many others. Incidentally it may be pointed out that in his list of the above 42 there is no ecclesiastical writer of the 13th century, nay, no author from 650 A.D. to the 13th century.

It cannot be pleaded that in his *Two Apostles of India* (proper, St. Thomas and St. Bartholomew) Fr. Heras, the reputed historian, has accepted Fr. Perumalil’s conclusion of 1942. I leave it to scholars to judge whether my arguments for ancient *pseudo-* or *deutero-* Indias, against Fr. Perumalil’s conclusion of 1942, and Fr. Heras’ approval, are valid or not. I do not plead that I have on my side Fr. Carpentier, Fr. Thurston, Prof. Bevan, Dr. Mingana, Dr. Medlycott, Fr. Hosten, Priaulx, McCrindle, and others.

#### IX. NO DOUBT

I confirm what I said in IB and IC of my Rejoinder (1947, p. 175) :

(a) His conclusion of 1942 is *not legitimate* as he has *not* examined *all* passages, *even if* he went through *all* the Greek and Latin works of B.C. 326 to 641 A.D. He has yet to prove that before arriving at his conclusion of 1942 he had access to, and had *examined*, *all* the above works. I do not think that all those works, published and unpublished, are available in India. By 1942 did he go through *all* the works of even Rufinus?

(b) His conclusion is not correct, because the Indias of Ptolemy and the *Periplus*, and of the extract from *Itiner. Alex.* and Rufinus are not his Indus—Himalayas—Ganges—Comorin—Indus India.\*

\* The controversy will now end.—Editor.



## Ports and Marts of Malabar (A.D. 50-150)

(Some new identifications)

BY

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~~Trivandrum~~

The ports and marts on or near the sea coast of Malabar, and the rivers and mountains mentioned in the *Periplus* and *Tabula Peutingeriana*, and by Pliny and Ptolemy have already been identified by European and Indian scholars. But some of their identifications appear to be mistaken. New identifications are therefore suggested in these brief notes, based on intimate knowledge of the locations of those places.

In the list below the names of the works are given in brackets first, and the localities are arranged from North to South—from Leuke Island to Cape Comaria. The Pirates' region (*Periplus*), or "Ariake Andron Pieraton" (Ptolemy) was beyond Malabar, and is not therefore included in the list.

1. (*Periplus*) : "Leuke Is." = *Lucca—dive Is.*, 11·30 N., 72·5 E., near the coast"; Long. 118, Lat. 12, according to Ptolemy's computation, not always reliable. "Lakka", unintelligible to the peripluser and Ptolemy, was probably construed by them as Greek *Leuke* = white. Other instances of such alteration will be found below (Nos. 12, 15).

2. (*Periplus*) : "Naura" = *Caṇṇa-nūru*, briefly *Caṇ-ṇūru*, English Cannanore. Naura was a market in Damirika, the Tamil-ic region then comprising the present Malayalam areas of trans-Cochin Malabar, Cochin, and Travancore, and the present Tamil areas beyond Cape Comorin. See No. 16.

Damirika, the correct form of "Limyrike", &c., seems to be the North Indian Prakrit *Damila*, rather than South Indian *Tamil*, plus the Greek ending *ike* as in *Mousa*, *Mous-ike* (music, noun), although *Tamil-akam* (=Tamil land) has been given by some authors as the original. North Indian guides in Greek ships may



have given the Greeks the Prakrit forms of even South Indian names.

3. (*Periplus*): "Tundis, or Tyndis in the kingdom of Keprobou(th)rou" (=Chēra-putra), in Damirika above. This is Kaṭal-tuṇṭi, vulgo Kaḍaluṇḍi. (*Ptolemy*): "Tyndis, a city in Limyrike". Kaṭal-Tuṇṭi = raised land (near the) sea.

4. (*Ptolemy*): "Bramagura", probably Parappanangāḍi.

5. (*Ptolemy*): "Kalaikarias", Chālakkuḍi, as most scholars agree. Ch of Tamil of the first centuries became K as in Chera-Kero in No. 3. Tamil ṭ, cerebral (as well as Tamil ḷ) was represented in Greek by ρ. (Ϸ, ϣ, ϡ, Ϣ, = Gk. ρ).

6. (*Periplus*): "Muziris" on a river in the above Chera kingdom. This is in Cranganore territory, and was a river-port near the present town Cranganore. Muziris may be under water now. Tamil form, Muciri, Muṣiri (முசிரி). There was a Musiris in Cappadocia. Was that name imported to Cranganore? (*Ptolemy*): "Mouziris" emporium near the mouth of Pseudostomos, the Periyār River—"20 stadia" (= 2 miles) "up the river from the shore", says the *Periplus* (60 A.D.).

7. (*Ptolemy*): Mouth of the river Pseudo-stomos (= false mouth), which is probably a Greek translation of Tamil poḷi-mukam (= a breach in the sand bar), vulgo poḷi-mukam (= false mouth).

8. (*Ptolemy*): "Podopercoura", probably Vaṭapaṛavūr (புடப்பூர்) North Paravur. Coins of Augustus, B.C. 39-14 A.D., and of some other Roman emperors were dug up in North Paravur (vulgo Parūr) about 20 years ago, and identified at the Madras Museum. (Paloura is placed by some authorities, near, but it is regarded by others as Pālūr in Malabar)

9. (*Ptolemy*): "Semne", probably Chemmanad, a little east of the eastern edge of the backwaters south of Musiris, No. 6. If it be Semve it may be Chempu, on the eastern shore of the backwaters. (Gk. n and u are almost alike).

10. (*Ptolemy*): "Korcoura", probably Kāṭṭūru south of the better known Mārārikkulam, west of the backwaters. The first r stands for Tamil ṭ, as in Kalaikarias, No. 5. If K be a misreading of T, it may be 'Torcoura', Toṛavūru (correctly, Tuṛavur) near Kāṭṭūr, above.

11. (*Periplus*): "Barakē, Bakarē, market-town and village at the mouth of a river. (*Pliny*): "Becare---- a port in the territory of the people called Neakyndi," No. 13 below. (*Ptolemy*): "Bakare"

in Limurike, at or near the mouth of the river Baris. This is *Purakkāṭu*, 10 miles south of Alleppey harbour. *Vulgo* *Prakkāṭu*. So the Greek form may have been *Barakē*, or *Brakare*; or if the North Indian guides pronounced it without the first *r* (as in the case of *Dramida-Danila*) it may have been *Eakare* in Greek. The Latin *Pliny's* *Becare* represents the common pronunciation *Peṛak-kāṭu* (with *e* for *u*). Perhaps some took *āṭu* as the suffix *ad* found in *Naiad*, *Dryad*, &c., and omitted it. The Portuguese, Dutch and English called it *Porka*, without, of course, any knowledge of the Greek form *Barakē* devoid of *ad*.

12. (*Ptolemy*): Mouth of the river "*Baris*", which is, no doubt, the Pampā River of Central Travancore. Since *Gk. baris* means boat, it was the boat-river. And *Pliny* (VI. 26) says that "pepper is carried down to *Becare* in boats hollowed out of a single tree", which are even now in vogue. Or, *Baris* may be regarded as an intelligible (see *Leuke*, No. 1) Greek form of the latter half of the long Tamil name *Pam-paiyāru* (= Pampā river). *Paiyāru*--*Baiyāru*--*Baiyāris*--*Baris*.

13. (*Periplus*): "*Nelkynda*", market-town of leading importance (like *Muziris*) up the river above, and in the Pandyan kingdom, and not in the Chera kingdom. (The Pampa river was then the boundary). It was 120 stadia (=12 miles) up the river. (*Ptolemy*): "*Melkynda*", in the country of the *Aici*, the *Ay* chiefs under the Pandyan king ruling from distant *Madura* on the east coast. (*Pliny*): "*Portus gentis Neacyndon*", variant readings being *Neacrinдон*, *Neachynдон*, amended recently as *Neacyndon*. (*Tabula Pent.*): "*Nineylda*". See *Schoff's Periplus*.

This Pandyan market-town of leading importance rivalling the Chera's *Muziris* is *Nākkida*, about 13 miles ("120 stadia") up the river Pampa, from *Purakkad*, No. 11, where the river fell into the sea in ancient days as geological evidence shows, although it does not do so now.

A coin of *Augustus* was picked up from *Nākkida*, or *Niranam* very near it, some years ago. Roman gold coins were discovered also in *Chengunnūr*, the present writer's place, further up the same river in about 1898, or 1900, and sold to Dr. *Thurston* of the *Madras Museum* in about 1900 (between 1898 and 1904). One of the unsold coins, which I saw on 1st September 1947, was of gold, with the legends quite worn away. The owner said it was of *Theodosius*, and that the hoard contained *Augustus* coins also. In

Rānni too, further up the same river, Roman coins are said to have been discovered. The *Periplus* (§56) says, "There are imported here, in the first place, a great quantity of coin; topaz, --- crude glass, --- wine, not much ---. There is exported pepper --- produced --- in --- Cottonara". This applies to Muziris and Bakare—Neakinda. Theodosius I (379-395); II (408-50).

The Tamil poems speak of the import of *ponnu* to Muziris, which is probably gold coin, although *ponnu* (பொன்னு) has also the sense of gold. In the first century the Roman gold coins *aureus* and *denarius* were current throughout Western India from the Indus to the Cape, and *denarius* gave Sanskrit and the old Malabar language the word *dināram* (a gold coin) found in a Travancore inscription. Augustus coins were far anterior to the date (60 A.D., according to Schoff) of the actual voyage of the author of the *Periplus* written later (c. 75, or 80, or 90).

The new identification Nākkīḍa can be taken as correct. Neakydda, or Neakylda may have been the original form in the peripluser's note book of 60 A.D. in Greek capital (uncial) letters of that age. Ṭ of Nākkīḍa was represented in this case in Greek by *ld* or *dd*, and not by *r* as usual. He ought to have written Neakya.

Nākkīḍa (*vulgo* Nākkēṭa, with *e* for *i*) means the space between (two or more) tongues, i.e. branches, of the river Pampa. The place still answers to the first century description, because the Pampa River bifurcates there. Another river called the Manimala river joins the northern branch a little below the point of bifurcation, and the river Achankōvil joins the southern branch a few miles below the same point. In the first century too those three rivers probably met at Nākkīḍa (in English Nakkida), and pepper could be brought to that "market-town of leading importance", in "single-log boats" from "Cottonara", No. 14 below.

14. (*Periplus*): "Kottonarikē", a "district" near the two important market-towns Muziris and Nakkida, in which "region" alone pepper is produced in quantity" (§56). Pliny was quoted already in No. 12. Ptolemy does not mention this region or district, but most of his "inland" localities (which are not dealt with in the present notes) between the Periyar and Pampa Rivers can be identified in that region of pepper, where reigned "the Queen of Pimenta" (the Pepper—Queen) in the days of the Portuguese (1498—1663).

Corresponding in sound to Cottonara (*tt* pronounced somewhat like double *th* of English, and not like *tt* in letter) there are (1) between Muziris and Nakkida (i.e. between the rivers Periyar and Pampa of Travancore), (2) above, i.e. to the north and north-east of it, and (3) in the region adapted to the growth of pepper "in quantity", the names of the following places:—

(a) Tekkum— and Vaṭakkum— (— Southern and Northern) —*Kūrṛanāṭu*, in the latter of which was "the Pepper—Queen", mentioned above.

(b) *Korṛanāṭu*, a few miles above Nakkida. This is *very* nearly "Cottonara", *c* being *—k*, and *r* *—ṭ*.

(c) *Kaṭanāṭu*, north of Kottayam in Travancore; a small, old principality.

(d) Two or three *Kūrṛanāṭus* north and south of Kottayam.

(e) *Kuṭṭuvanāṭu*—the land of the Kuṭṭuvan, the Chera King, which may be the same as the *Kuṭṭam* (—*nāṭu*) mentioned in Tamil grammars as one of the several lands in which a dialect of pure Tamil was spoken.

In the days of the *Periplus* (60), Pliny (23—79), and Ptolemy (c. 150), and even later there were Chera Kings with the title of Kuṭṭuvan (c. 75—230, according to Sesha Aiyar's *Cera Kings*, 1937, p. 128).

Any one or more of the above names (a to e) may be taken as the original of "Cottonara" as the localities are (and presumably were in the early centuries) in pepper areas.

Below Nakkida, and in a region *not suitable* for the production of pepper "in quantity", there is the water-logged region Kuṭṭanāṭu, famous for paddy and coconut trees. This does not appear to be *Cottonara* although there are pepper-growing highlands close to it, in the east. Kuṭṭam, Tamil, means depth, and Kuṭṭanāṭu is deep, low-lying, land almost always covered with water.

15. (*Periplus*): "*Purron Oros*" (*Mountain*)—the dark-red mountain. This is the Travancore Ghats, called (a) Pūrva Parvata (Skt.), (b) Kilakkan Mala (Malayalam), or (c) Sahya Parvata (Skt.). The names (a) and (b) mean eastern mountain, while (c) Sahya, although it has the sense of endurable, must be the Sanskritised form of some Tamil name, probably *Cheyya* (செய்ய) meaning *red*. So *Purron* (Gk.) may be a translation of *cheyya* (*red*, with the rays of the rising sun). Or it may be a Graecized

form of the above Pūrva (a). This eastern mountain range must have presented a very striking spectacle to the Greek mariners, especially at dawn. It may be Cēṭ-kunram=red-hill of Tamil *Silappatikāram*.

16. (*Periplus*) : "*Paralia*"=sea-coast. This must be the littoral "district stretching along the coast towards the south" from the southern end of the district of Damirika, which the author seems to have regarded as ending at Bakare (Purakkad). Ptolemy's Limyrike (Glk,  $\Delta$  for  $\triangle$ ) too extended from somewhere north of Kadalundi (near Calicut) down to the mouth of the Pampa, i.e. to Bakare itself.

*Paralia* (=coast) district of the *Periplus* stretched from Purakkad down to Cape Comerin, and further on to Kolkaṭ (Colchi of the *Periplus*) on the S.E. coast, and to Point Calmère (Kaḷḷimēṭu) further north of Cape "Kory" (Dhanush-kōḍi). But the peripluser, who does not appear to have come far south of Bakare, supposed that even from the Cape to Kolkaṭ or Kory the *paralia* (coast) extended southwards! This mistake, to be sure, is not more egregious than that of Ptolemy whose notion was that the coast of India up to Kory stretched from west to east!!

Kalidasa, and other North Indian authors too had the wrong notion that the southernmost point of India was Kory (Dhanush-kōḍi), and that the "Malaya" mountain of the Nilgiri region, extended up to Kory, whence began Rama's *Seru* (Adam's Bridge). See *JIII* (1947), pp. 263-67. The *paraliā* of the *periplus* was divided into two sections by the Pārthen Mountain, No. 15.

Ptolemy's "*paralia*, properly so called", was the broad, mountainless Chola (Coro)—mandal coast mentioned under the Greek heading :

"*Tēs idiōs kaloumenēs paralias Tsōringōn*"

which means 'In the properly called seacoast of the Chola (Tsora) king' (kōn, Tamil). Some recent interpreters wrongly regarded *paralia* of the above heading as a place-name, while some Christian writers other than St. Isidore of Seville (died 636), seem to have mistaken Kaloumenes (=called), which in some Greek mss. has wrong forms kaloumaines, etc., as a place-name Kalaminē (Latin Calamina), the name of the coast where St. Thomas was, from about 1,200 A.D., said to have been martyred. See Medlycott, *India and the Apostle Thomas*, 1905, pp. 150-170. See P.S. 2 at the end for Dr. Henning's note, which may lead to the rejection of the long-

accepted reading '*paralia*'. Isidore's Calamina, a town of India (N.W.), was "in the furthest eastern parts of the land of the Parthians and the Medes", and not of India, or the world.

17. (*Periplus*) : "*Balita*", "village and fine harbour, the first in *paralia*", No. 16. There is *Tieu—Vullattu* on the sea near Trivandrum. *Tiru*, Tamil, meaning prosperous (Skt. *Śri*), is no essential part of the place-name. If the name be *Balina* (with *n* for *t*), it may be identified with the wellknown port of Viliñam, south of Trivandrum. Tamil inscriptions have the form Viliñam. In later European records it appears as Brins-john, etc.

18. (*Ptolemy*) : "*Elangkor*, or *Elangkon*". If Greek  $\Lambda$  here was originally  $\Delta$ , the name is the latter half of *Tiru—Eṭṭāṅkōṭu* (split form of *Tiruveṭṭāṅkōṭu*, correctly with *ē* for *ee*). This is Travancore of the Portuguese records, which had been pronounced as *Travāṅkōṭe* before it came to be pronounced as *Travancour* in English. It was the ancient capital of the Travancore State, which got its name from that city, N.W. of Kottar, No. 19. R in *Edangkor* stands for *ṭ*.

19. (*Ptolemy*) : "*Kottiaru*", the metropolis. This is *Kōṭṭār* as all agree, and does not seem to be another place near it called *Koṭṭāram*.

20. (*Ptolemy*) : "*Baminula*". This is *Marut-Vāmala*, a conspicuous hill near No. 19. This *mala*, hill, is visible from ships.

21. (*Periplus*) : "*Comari*", with "cape and harbour". No harbour there now. (*Ptolemy*) : "*Komaria*", a cape and town in the country of the Aioi, in the then Pandyan kingdom. It now belongs to Travancore. As Malabar ends here, Colchi (=Kolkai, and not Colachal), Kory, etc. beyond it are not considered here.

Of the above 21 identifications Nos. 1, 4, 8, 9, 10, 12, 13, 14, 15, 16, 17, 18, and 20 are mine own. They are probably correct. Kosmas' five marts of "Male" (two syllables) that export pepper, viz. Parti, Mangarouth, Salopatana, Nalopatana, and Poudopatana (c. 535), do not appear among the above 21.

### Postscript 1

In addition to the Roman coins mentioned above, and those discovered and dealt with by Sewell, Rapson, and others, there were unearthed in Cochin, in 1946, "Indian (or local ?) punch-marked silver coins (about 25) with dated gold and silver Roman coins (about 100), discovered (September 1946) from Eyyāl, a

village on the high-way between the ancient emporiums of Tyndis and Muziris, indicating the first impact of the Roman civilization with Cochin—circa first century A.D.”—Page V of *Exhibits in the Archaeological Museum, Cochin, 1947*. The above Roman gold coins are of Tiberius (3), Claudius (1), Nero (2), and Trajan (one). The others have yet to be identified.

Again, about August 1945, on a hill near Ponkunnam in the pepper-region between the two rivers on which Muziris and Bakare—Neleynda were situated, a hoard of 188 (or 184 ?) punch marked silver-alloy pieces, somewhat like coins, were dug up by a cultivator from a depth of 1½ ft. They are thin, and not circular. Of the six cleaned pieces examined on 17th December 1945 by the present writer, one had the English name JULIAN incised near the margin on one side in capital letters like the modern English capitals, and not Roman capitals of the early centuries. This JULIAN does not seem to be the Roman emperor Ivlianvs, for there is no —us (nominative), or —i (genitive), or any sign of abbreviation after JULIAN, even though there is space for it after N. Besides, the letters, are plain and are not embossed. In Latin it is IVLIANVS.

#### Postscript 2

As for paralia (No. 16 *supra*) Dr. W. B. Henning of Cambridge, in a note kindly sent to me on 3rd March, 1948 through the School of Oriental and African Studies, London, says:—

“*Paralia is uncertain. MS. has:—Apo de  
Bakarēs to legomenon purron oros  
allē parēke chōra tē kēs ē  
paradia legomenē.*”

(a) If Paradia be the original reading of the *Periplus* it may be interpreted as a Graecised form of Pavaḷa-dīpa (=the pearl region), the North Indian guide's Prakrit form of Sanskrit Pravāla-dvīpa, or a form of Tamil Pavaḷa-tivu (பவழதீவு). Here dīpa (=tivu, தீவு) has the sense of littoral region as in Saka-dvīpa (the Sakas' region, the estuary of the Indus), Jambu-dvīpa, etc.; and the unfamiliar ḷ of the northerner, or ḷ of the Tamilian of the first century is represented in Greek Paradia by r. Tamil Pavaḷa-tivu sounds more like Paradia than the Prakrit Pavaḷa-dīpa, v being elided from Pavaḷa. The Tamil name (பவழதீவு) could appear in Greek as Pavara-dia, without elision, or Para-dia, with

elision of v. Diu, the European name of the island south of Kathiawar is from Dīpo of Prakrit, ~~perhaps~~ <sup>not</sup> the “Dibous”, or “Divus” of Theophilus the Indian (372 A.D., *apud* Ammianus Marcellinus).

(b) Alternatively Para-dia (Greek) may stand for the Tamil name Parava-tēyam (பரவ-தீகயம்), =Paravas' region (dēśa in Sanskrit). Parava is the pearl-fishing caste of South India, and in Portuguese and Dutch records (since 1500 A.D.) the S.E. coast is called the Pearl-Fishery Coast, as distinct from the Coromandal further north. Ptolemy calls this coast Paralia *properly* so called, perhaps hinting that the author of the Periplus had, a hundred years before, applied the name improperly to the S. W. coast also, where there was no pearl-fishery in those days.

(c) Is it likely that paradia was coined by combining the Greek prefixes *para* (=beyond), and *dia* (=through, across) to sound like the above Prakrit or Tamil word? It may be observed that the Arabic name Maabar for that region contains the senses of *para* and *dia*. Some medieval writers seem to have called this region, rather than Ceylon, “Para-dise”, Parava-deśa.





## The Malaya Mountain

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The Mahēndra, Malaya, and Sahya mountains of South India, and the rivers Kāvēri, Krtamāla (=Vaigai), and Tāmraparṇi in their regions, all six of which are mentioned in the Puranas, the Ramayana, and Kalidasa's works, could be only *very conspicuous* physical features visible to those in South India or those from the North, who travelled by land in ancient days in the eastern plains and the east coast of South India below Kalinga, and by sea in ships sailing close to that coast which was divided into the Pearl Fishery and Coromandel coasts. We may assume that none of those travellers, even the Jaina and Buddhist missionaries who were fond of hills, did actually visit those three conspicuous mountains. The heroes and armies mentioned in the Ramayana and Raghuvamśa (except Hanumān) had no occasion to go up those lofty mountains through the dangerous cimmerian forests of the period around 1 A.D. Of the many rivers south of Madras we find only three (Kāvēri, Vaigai, Tāmraparṇi) mentioned by name, and that most probably because the ancient cities and ports (Pukār, Madura, Korkai, &c.) of the Cholas and Pandyas, who were known to Asoka and even to the more remote Greeks and Romans, were situated on those three rivers.

The highest, and therefore, the most conspicuous mountains in South India *below* the Kaveri are three according to the relief maps and relief models. They are—

1. The Nilgiri Hills plus the highest part of the Deccan Table-Land (Mysore) just north of them. The Kaveri flows across this part. Those Hills have the highest peak Dodabetta, 8640 ft. All these are north of the Palghat gap, and bound the northern portion of Malai-Nādu (=Mala-bar=Mala-ālam) on the east.

2. Anamalai Hills south of the Palghat gap, with their highest peak Anamudi (8,837 ft.) N.E. of Travancore, and their extensions to the east, and to the south as far as Cape Comorin, the Land's End

of India. These lie in Cochin and Travancore. The highest peaks of the Travancore portion are Agastya-kūdam (6,132 ft.), and Mahendra-giri (5,500 ft.). The whole range is called the Sahya Parvatam (Cardamum Mts.)

3. A detached hemispherical mountain to the east of the eastern spur of the Anamalais. It is between Trichinopoly on the Kaveri and Madura on the Vaigai south of the Kaveri. The Trichy-Madura Railway passes through the plain between the above spur and the hemispherical mountain, to Rama's Setu.

There is another detached mountain consisting of a pair of hemispheres to the east of No. 1 above ; but it is north of the Kaveri, and not south of it. It flows between No. 1 and this double hemisphere.

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The Kula Parvata Malaya mentioned in the Puranas and other Sanskrit works written in North India must be No. 1, the Nilagiri Mts., although most authorities identify the Malaya Mt. with "the southern end of the Western Ghats." But according to geographers "the Western Ghats run almost without a break from the Gulf of Cambay to Cape Comorin. . . . and the Eastern and Western Ghats may be said to meet in the Nilgiri Hills", No. 1 above. So the southern end of the Western Ghats is near Cape Comorin, with the Agastya and Mahendra peaks (see No. 2) close to it. If by "the southern end" is meant the meeting point (No. 1) at the Nilgiris there is no mistake in their identification. (See Dr. Kumhan Raja and Dr. D. C. Sircar in *IHQ* for Sept. and Dec. 1946).

Nilā-giri, a Sanskrit name, must be a translation of the local Tamil name Nila-Malai, and the appellation "Malayah" is no doubt the Sanskritised form of Tamil *Malai*. From Malayah the compound word *malayaja*, and the *taddhita* form *mālēya* (coined by Malabar Brahmins) have been formed to signify sandalwood. It may be noted that the 'e' in the Malabar form *mālēya* is a vestige of the colloquial pronunciation *malei*, the pedantic form being *malai* (with *la* and not *le*). The northern Sanskritists would have formed *mālāya*, and not *mālēya*, from *malayah*. These names for sandalwood indicate that there were sandalwood trees growing in the Malaya Mountain, even if we have not the descriptions of such trees and the snakes on them, found in Sanskrit works. And we recall that Mysore just north of this Malaya Mt. is now famous for its sandalwood, and not any part of the Ghats south of that Mt.

Kalidasa's description of Malaya as full of sandalwood and snakes, and as south of the *Kaveri*, and also as adjoining the Pandyan plain agrees with the situation of the Nilagiri Hills and their neighbourhood, and the trees peculiar to that region.

The Kula Parvata called in Sanskrit the Sahya (evidently formed from a Tamil name, perhaps *cheyya-malai*, the red mountain, or the mountain of the red, rising sun) is undoubtedly the Cochin-Travancore Ghats (No. 2) south of the Palghat gap, although one or two Malabar poets have wrongly called it Malaya Mt. (No. 1). Anamalai at the northern end of it seems to have been given that name because from a distance it looked like an *ānai*, elephant. Unsophisticated folk call the Sahya (the red, rising sun's mountain, the *udaya parvata* in Sanskrit) the *Kizhakkan Mala*, the eastern mountain, Sanskrit *Pūrva Parvata*.

The *Periplus* (60 A.D.) mentions a *Purrhon* Mountain in Travancore, which scholars like Schoff have identified with the "Red Bluffs of Warkala and those below Anjengo", both on the coast of South Travancore. But these low bluffs cannot be called mountains. It is probable, therefore, that the *Purrhon* (=red) Mountain which the 'peripluser' saw at a distance from his ship, as flooded gloriously with the red rays of the rising sun is the red Sahya. Or, he might have been given the Sanskrit name *Purva Parvata* (meaning the eastern mountain) by the North Indian guides in his ship, and he must have noted it down in his log book as *Purrhon* assimilating the unwieldy Sanskrit name to his Greek word *purrhon* meaning red, thus unwittingly combining the idea in the name Sahya (= *cheyya*, red) with the sound of the name *Pūrva* (parvata).

\* \*  
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It seems that the notion of Kalidasa and other ancient authors of North India, who never visited the south, was that the Malaya Mountain extended down to Rama's Setu (now Adam's Bridge) beginning from Dhanushkodi in Ramnad, on the South East coast. See Kalidasa's—

vaidēhi, paśyāmalayād vibhaktam  
matsētunā, phēnilam amburāśim

in his *Sandesā*. To them India extended 'āsētu himācalam'—i.e. from Rama's bridge to the Himalayas.

Nor are these to blame. For the ancient western geographers too had the same wrong notion. For instance Hecataeus of Miletus (born C. 540 B.C.), Eratosthenes, the Alexandrian Librarian (276-196 B.C.), Pomponius Mela the Spaniard (C. 40 A.D.), the author of the *Periplus* (60 A.D. or C. 75), and Ptolemy (C. 150). These mention Kory (=Kodi) as the southernmost point of India. This Kory is not Cape Comorin, which they mention separately as Comaria, or Comari. It is Dhanush—Kodi, Greek *r* being usually written to represent the un-Greek cerebral *ḍ* or *ṭ* found in Indian languages. It is surprising that even the author of the *Periplus* who came at least as far as *Bakare* (=Purakkad near Alleppey, and not Vayakkara as usually interpreted), and Nelkynda (=Nākkida on the river Pampa, the *Baris* river, Boat river, of Pliny, 77 A.D.), entertained the same notion.

Kalidasa, we know, mentions two South Indian mountains "Malaya-Dardura", the Malaya and Dardura as the twin breasts "stanau" of the southern region. Malaya we have already identified with the Nilgiris. Dardura seems to be the hemispherical mountain east of No. 1 in the list at the beginning of this article. Dardura (Skt.) means a frog, and that mountain was perhaps so called because it looked like a frog or toad from a distance.

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The Mahendra mountain, one of the seven Kulaparvatas, from which Hanuman leaped to Lanka must be some high mountain near Ceylon, and Rama's bridge. It cannot be the Mahendragiri near Cape Comorin, as it is far away from Ceylon

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\*

Now, corresponding to Malaya of Sanskrit derived from Tamil Malai (*vulgo* Malei) there is in the *Christian Topography* of the Alexandrian Greek monk and traveller Cosmas Indicopleustes (A.D. 520-25) the name Male (two syllables) for Malei-Nāḍu, (Mala-bar, Mala-ālam) thus in two places:—

1. Omoiōs kai eis tēn legomenēn *Male*, entha to peperī ginetai (Book III).

2. legō dē tē *Male*, en ē to peperī ginetai (Book XI).

This Greek name *Ma-le* (Tamil *ma-lei*) for *Mala-bar* (Kerala) must have been derived from either *Nila-Malei* (Nilgiris, *Malayah*), or *Sahya-Malei*, or more probably from both, i.e. the Malabar portion of the Western Ghats. Cosmas heard the lengthy local name *Malei-nāḍu*, and must have curtailed it into simple *Male*, dropping even the final *i*, and giving it a Greek desinence. This perhaps occurred, let us note, long before the same land was called *Mala-bar* and *Mala-āḷam* by the Arabs as translations of local *Malei-nāḍu*. The Portuguese, we find, called it the *Serra* (mountain), translating *Malei* (after 1498).

Before or after Cosmas another name *Mala-n-kara* (used exclusively by the ancient Syrian Christians of Malabar) was given to the Malabar Diocese of the Christians, probably by some Persian or Syrian bishop who ruled the Malabar Diocese. The name *Malankara* seems to have been coined by adding the Greek word *chora*, or the Syriac word *khere* (both meaning land) to *Mala* (mountain). This *Mala-chora*, or *Mala-khere* was easily assimilated by the Malabar Christians to their intelligible word *Malankara*, meaning the *Mala-land*, or *Mala-shore*. There was, otherwise, no chance of such a newfangled name being adopted when there was the usual name *Mala-nāḍu* in vogue.







## The Ārya-Mañjuśrī-Mūla-Kalpa on Candragupta I

Candragupta I founded the great Gupta empire, and thus played a dominant role in ancient Indian history. Yet little is known about him. So we hardly need to offer an apology in drawing attention here to a passage of the AMMK which may prove as containing some information about this king.

The passage in question runs as follows: —

ता पूर्वदेशेऽस्मिन्नगरे तीर्थिकसमाह्वये ।  
भगवाह्ये नृपे ख्यातः गौडानां प्रभविष्णवः ॥६६४॥  
अभिषिक्तो दक्षिणात्येन प्रतिना प्रभविष्णुना ।  
राज्यं कृत्वा तु वै तत्र पश्चिमां दिशिमागतः ॥६६५॥  
प्रविश्य नगरीं रम्यां साकेतां तु यथेप्सितः ।  
अरिणा भूतस्तु पुनरेव निवर्तते ॥६६६॥  
प्राचीं समुद्रपर्यन्तां तस्करंश्च समावृतः ।  
शस्त्रप्रहारविश्वस्तमृतोऽसौ प्रेततां गतः ॥६६७॥  
त्रीणि वर्षाणि कृत्वासौ भूपालो राज्यमल्पकम् ।  
ततो दस्युभिर्ग्रस्तः मृतः प्रेत महद्भिकः ॥६६८॥  
त्रीणि वर्षाणि तलैव प्रेतभ्यो राज्यमकारयेत् ।  
ततोऽपि सो त्यक्तदेहस्तु प्रेतलोकां सुदारुणाम् ॥६६९॥  
तस्मान्मुक्तजन्मानः स्वलोकं च सदा व्रजेत् ।  
तस्याधरेण नृपतिस्तु समुद्राह्यो नाम कीर्तितः ॥७००॥<sup>1</sup>

It has been generally recognised that the king of Gauda named Samudra (नृपतिस्तु समुद्राह्यो), referred to here in the verse 700, is Samudragupta of the Gupta dynasty<sup>2</sup>. At another place the author of the AMMK has described the Gupta king Samudragupta exactly in the same words:

समुद्राह्यो नृपश्चैव विक्रमश्चैव कीर्तितः ।  
महेन्द्रनृपवरो मुख्य सकाराद्यो मतः परम् ॥६४६॥<sup>3</sup>

Then, approximately chronology and location of kingdom also warrant the conclusion that king Samudra of the above passage should

1 K. P. Jayaswal, *Imp. Hist. of India*, text, pp. 50-51.

2 K. P. Jayaswal, *ibid.*, pp. 48-49; P. L. Gupta, *J.N.S.I.*, vol. V. 1943, pp. 149-150 and *IHQ.*, vol. XXII, 1946, pp. 60-61; Heras, *JBRS.*, 1948, pp. 19 ff. and others.

3 K. P. Jayaswal, *ibid.*, text, p. 47 verses 646.

be identical with Emperor Samudragupta of the Gupta dynasty. Besides king Samudragupta of the Gupta dynasty, we do not know any other king of Gauḍa of ancient times to have had this name.

Now if Samudra of this passage is Samudragupta of the Gupta family, the verses from 694-699 should be found to refer to the predecessor of this king. We know from other sources reliably that the predecessor of Samudragupta was none but Candragupta I. Dr. K. P. Jayaswal also saw in these verses a reference to Candragupta I of the Gupta dynasty<sup>4</sup>. He interpreted this passage in accordance with his conception of the early Gupta history as based on the Kaumudī-Mahotsava. This interpretation has, however, not found favour with our historians, and so we need not examine here the observations made by Dr. Jayaswal.

It will suffice to state that if it is accepted that the above passage refers to Candragupta I, we come to know three new things about this king:

- (1) Candragupta I was installed in kingship of Magadha by some king of the Deccan;
- (2) He extended his kingdom, and penetrated up to Śāketa;
- and (3) Afterwards he was defeated and killed by his enemies who occupied his kingdom.

It cannot be said at present whether on critical examination of the above passage and with the increase of our knowledge about the early Gupta history, these facts about Candragupta I will be found to be true or false. But this much may be stated with all reservation that up to this time we do not know anything which does not suit these facts.

First, it is said that Candragupta I was coronated by some king of the Deccan. In itself there is nothing in this statement which may not be true. In the time of the rise of Candragupta I Indian politics was dominated by the later kings of the Śātavāhana family, their successors and the Vākātakas who were all southerners. Then again the Gupta genealogies show that the father and the grandfather of Candragupta I were simply Mahārājas. So it is not unlikely that in the beginning of his rule Candragupta I accepted supremacy of any one of these Deccan kings.

4 *Op. cit.*, pp. 48-49 and 52.

Secondly, it is said that Candragupta I extended his power and conquered up to Sāketa. This fact also is confirmed by the Gupta inscriptions and coins. In contrast to the lower titles of his father and grandfather, the genealogical portions of the Gupta epigraphs name Candragupta I with the title Mahārājādhirāja. It shows that Candragupta I enhanced his kingly prestige. Moreover if it be accepted, as it is emphatically said to-day, that Candragupta I issued the marriage-type coins, then it becomes clear that Candragupta I was the first king of his family to issue coins. This fact may be interpreted to mean that he freed himself from the supremacy of other kings. A small number and a single type of these coins may further be taken to indicate that Candragupta I began to issue coins late in his life, and thus that he claimed sovereignty much after his coronation.

It is quite possible that Candragupta I had conquered up to Sāketa. The inheritance of Samudragupta as known from his Allahabad Pillar inscription most probably included these territories.

Lastly, it is said that towards the end of his life Candragupta I was defeated and killed by his enemies. Nothing is known definitely on this point. However, we would like to quote two verses from the Allahabad Pillar inscription in this connection. One verse probably indicates that Candragupta I left his throne and made Samudragupta king under special circumstances<sup>5</sup>. It is not unlikely that he was dying of some fatal wound inflicted by his enemies, and he selected the brave Samudragupta as a king in view of the invasion of his enemies:

आर्यो हीत्युपगुह्य भावपिशुनैरुत्कर्णितै रोमभिः  
सभ्येषु चक्षुसितेषु तुल्यकुलजम्लानाननोद्वीक्षितः ।  
स्नेहव्यालुलितेन वाष्पशुरुणा तत्वेक्षिणा चक्षुषा  
यः पित्राभिहितो निरीक्ष्य निखिलां पाशेवमुर्वीमिति ॥<sup>6</sup>

In the other verse it is said that Samudragupta defeated some of

5 Dr. R. C. Majumdar, *A New History of the Indian People*, vol. VI, pp. 137-8.

6 Dr. D. C. Sircar, *Sel. Ins.*, vol. 1, p. 255.

his enemies at Pāṭaliputra. It is likely that these were the kings who had defeated Candragupta I and had come over to Pāṭaliputra :

उद्वेलोदितबाहुवीर्यरभसादेकेन येन क्षणा—

दुन्मूल्याच्युत-नागसेन ग[णपत्यादीन्नुपान् संगरे ? ]

दण्डैर्माहयतैव क्रोतकुलजं पुष्पाह्वये कीडता...<sup>7</sup>

Thus if the Allahabad Pillar inscription be interpreted in this way, even the third statement of the AMMK about Candragupta I will be found to be correct.

In conclusion, it may be said that if referred to Candragupta I, as it should be, the above passage of the AMMK suits him well. One passage from a forged Purāṇa text, alleged to have been from a Kaliyuga-Rājavṛttānta-Kathā, also described Candragupta I's history with similar details. It is possible that the forger might have taken these details from the AMMK. At any rate, for the present his source for these details is not known at all. But it is natural that like other parts of his history, he should have based this part also on some source. If this source be some one other than the AMMK, we shall find one more corroborative source for the tradition about Candragupta I given in the AMMK.

KAILASH CHANDRA OJHA





## Ghaṭotkacagupta

There is a gold Gupta coin in the Leningrad Museum with the king on the obverse, (nimbate, standing to left, holding bow in left hand and arrow in the right) Garuḍa standard is on the right of the king; beneath the left arm is inscribed *Ghaṭo* with a crescent above. It bears traces of a marginal legend ending in *(gu)pta(h)*. On the reverse of the coin is the Goddess (holding lotus in left and *pāśa* (fillet) in out-stretched right hand) with a symbol on the top left corner. The legend on this side is not certain but seems to be *Kramāditya*. The coin is classified as unattributed by Mr. Allan in his catalogue.<sup>1</sup>

The initial *Ghaṭo* and *guptah* in the margin naturally suggest that the name of the issuer of the coin was Ghaṭotkacagupta; but so far no king among the Imperial Guptas is known with this name other than Ghaṭotkaca, the father of Candragupta I. As Mr. Allan has pointed out, the coin cannot be attributed to him as the style and weight of the coin places its issue about the end of fifth century.<sup>2</sup>

One Ghaṭotkacagupta is known to us from an oval seal ( $1\frac{1}{2}'' \times \frac{3}{4}''$ ) from Basarh, the ancient Vaiśālī. It contains within a single border line '*Śrighaṭotkacaguptasya*.' Dr. T. Bloch identified this Ghaṭotkacagupta with Ghaṭotkaca, the father of Candragupta I.<sup>3</sup>

Vincent Smith also accepted his identification.<sup>4</sup> But it is hardly convincing. The seal was found with the seal of Queen Dhruvasvāminī, wife of Candragupta II and mother of Govindagupta. So it could only be contemporary member of Candragupta II's family. But Mr. Allan is not inclined to attribute the said coin to the issuer of this seal, considering that the issuer of the coin was certainly later than the issuer of the seal.<sup>5</sup>

Recently we have come to know a Ghaṭotkacagupta from a fragmentary stone inscription found at Tumain (Dist. Guna, Gwalior State). More than half of it has broken away from left hand side and only right portion of the inscription is preserved. The available portions of the second, third and fourth line of the inscription run thus:—

1 *B. M. C.*, p. 149, pl. XXIV, 3; introduction p. liv.

2 *Ibid.*, introduction liv.

3 *Rep. Arch. S. I.*, 1903-4, p. 102.

4 *J. R. A. S.*, 1905, p. 153; *E. H. I.*, p. 266, n. 2.

5 *Op. Cit.*, p. liv.

2 .....श्रीचन्द्रगुप्तस्य महेन्द्रकल्पः कुमारगुप्तस्तनयस्स[मग्राम्]ररक्ष साध्वीमिव धर्मपत्नीम् वीर्याग्रहस्तैरुपगुह्य भूमिम् ।

3 .....गौरः क्षित्यम्बरे गुणममूह मयूखजालो नान्मोदितस्म तु घटोत्कचगुप्त चन्द्रः । स पूर्वजानां स्थिर सत्वकीर्तिर्भुजार्जितां कीर्तिमभिपपद्य ।

4 .....(गुप्तान्वया)नां वसुधे श्रराणाम् समाशते पोडशवर्षयुक्ते । कुमारगुप्ते नृपते पृथिव्यांविराजमाने शरदीव सूर्ये ।<sup>6</sup>

These lines refer to Candragupta II, his son Kumāragupta and to one Ghaṭotkacagupta, who won by the prowess of his arms the good fame attained by his ancestors. The date of the record is 116 of the era of the Gupta sovereigns when Kumāragupta I was ruling the earth.

From these lines it appears that this Ghaṭotkacagupta was one of the direct descendants of Kumāragupta I of the Imperial Gupta lineage. The portion giving the exact relation of Ghaṭotkacagupta with Kumāragupta I is missing, but the portion preserved indicates that he was most likely his son,<sup>7</sup> and was probably the Viceroy of Eastern Malwa.

To me, Ghaṭotkacagupta of this inscription and that of the seal and the coin is one and the same person.

The seal was found with the seal of Dhruvasvāmini and may be taken as contemporary to the latter. Dhruvasvāmini issued the seal when Candragupta II was alive, as is evident from the fact that she refers herself as the wife of Candragupta II and the mother of Govindagupta. If it was issued in the reign of Kumāragupta I, she would have mentioned herself as the queen-mother, as she was also the mother of Kumāragupta. And as such the seal was issued some time earlier than 93 G.E., the last known date of Candragupta II.<sup>8</sup> Ghaṭotkacagupta must have been elderly enough in 116 G.E., when the Tumain record was written, as he is credited with retaining the good name of his ancestors. It is very likely that he issued the seal when he was quite young and was not assigned with any official position. The period between the two dates is no bar to the suggestion and fit in the picture.

Now, the issue of the coin by this Ghaṭotkacagupta is also not improbable. He may have later succeeded his father Kumāragupta I or his brother Skandagupta and issued the coin, and as such his period should be the same as has been assigned to the coin by Mr. Allan on the basis of style and fabric.

Having ascended the throne at an advanced age, he probably

6 *Ep. Ind.*, XXVI, p. 117, D. C. Sarkar; *Select Inscriptions*, pp. 495-96

7 Ray Chaudhury, *P. H. A. I.*, p. 481.

8 Sanchi stone Inscription (*C. I. I.*, vol. III, p. 29).



ruled for a very short period. This fact is clear from the extreme paucity of the coin. It does not matter whether he succeeded Kumāragupta I or Skandagupta. The last known date of Kumāragupta I is 136 G. E. from the coins<sup>9</sup> and the same is the earliest known date of Skandagupta.<sup>10</sup> If Ghaṭotkacagupta succeeded Kumāragupta he retained the throne for a few months only. Kumāragupta might have died in the early part of that year and Skandagupta ascended the throne in the later part of the year. If he succeeded Skandagupta, even then his reign was short, as the last known date of Skandagupta is 148 G. E.<sup>11</sup> and the earliest known date of Kumāragupta II is 155 G.E.<sup>12</sup> Within this short period of seven years four kings Ghaṭotkacagupta, Purūgupta, Narasimhagupta and Kumāragupta ruled in succession. Naturally their reigning periods were short.

But the other evidences available indicate that Ghaṭotkacagupta claimed the throne on the death of his father Kumāragupta I and not on the death of his brother Skandagupta.

The two important stone inscriptions situated at Bhitari<sup>13</sup> and Behār<sup>14</sup> indicate that Skandagupta was not the legal heir of Kumāragupta I and the son of the chief queen—*agramahiṣī* or even of *mahiṣī*. In all the inscriptions of his predecessors and the successors the name of their mother, grand-mother and other fore-mothers are mentioned along with the names of father, grandfather and other fore-fathers. But Skandagupta in these inscriptions while mentions the name of his father, grandfather and other forefathers with the name of his fore-mothers and grandmother, he does not mention the name of his mother. The omission is significant and shows that he was shy of his mother, who was neither the *agramahiṣī* nor *mahiṣī* and could not feel pride in her. And as such he had no natural claim over the throne, even if he was older. The only way for the ambitious Skandagupta to achieve the throne was to oust the legal heir by fair or foul means, and he succeeded in it. We see in the following lines of the Junagarh rock inscription that he did have some struggle for the throne with some prince:.....*vyāpctya sarvānmanujendra-putraṃ lakṣmīḥ svayam yaṃ varyancaḥkār*.<sup>15</sup>

The line unmistakably does not refer to his glorious victory over the Puṣyamitras and the Hūṇas as the rock was inscribed within two

9 *B. M. C.*, p. 107.

10 Junagarh Rock Inscription (*C. I. I.*, vol. III, p. 56).

11 Gaudhum Rock Inscription.

12 Sarnath Inscription.

13 *C. I. I.*, vol. III, p. 53, ll. 7-8.

14 *Ibid.*, p. 50, ll. 22-23.

15 *C. I. I.*, vol. III, p. 59, l. 5.

years of his accession to throne. This *manujendraputra*, whom he had to face, could not be any one else but Ghaṭotkacagupta, who as the legal heir, must have claimed the throne and issued the coin as the token of his sovereignty.<sup>16</sup> If Skandagupta had ascended the throne as a matter of right he had not to worry to proclaim himself as '*Lakṣmī svayam yam varyancaḥār.*'

Thus there is every reason to conclude that Ghaṭotkacagupta of the coin, seal and the inscription is one and he succeeded Kumāragupta I and preceded Skandagupta; and he can now be safely placed in the Gupta chronology between them.

PARMESHWAR LAL GUPTA

16 Some scholars believe that the prince, who preceded Skandagupta was Purūgupta. It is disputable if Purūgupta ascended the throne at all. But if he ever ascended the throne, he must have succeeded Skandagupta and not preceded him. If Skandagupta succeeded after a struggle, he would never let him or his heirs survive to come into power again. It would be an undiplomatic move, and a perpetual danger over his head. A man like Skandagupta would not do so. We see, the descendants of Purūgupta had a long reign after him, which was only possible when Purūgupta succeeded Skandagupta.



## THE YAUDHEYAS

By

ŚRĪ PARMESHWARI LAL GUPTA.

One of the most important republics of ancient India was that of the Yaudheyas. A history of more than a thousand years is credited to them. It is believed that they survived from the fifth century B. C. to the fifth century A. D., and weathered many a storm during their long career.

According to Pauranic traditions, they go back to the days of the post-Mahābhārata period. They are claimed as the descendants of Yāudheya, a son of Yudhishtīra from a Śaibya princess named Devikā. It appears that in the beginning it was a monarchy, which was later on replaced by a republic.

In their republican form, their earliest reference is known in the Sūtras Pāṇini, which may be dated to about the fifth century B. C. There they are included among the *āyudhajīvin saṁghas* and referred to as a *janapada*. Pāṇini places them in the Vāhika country and with the Śāubhreya group.<sup>1</sup> Vāhika constituted almost the whole province of the Punjab of the pre-partition days.

Arrian mentions a powerful republic on the east side of the Hyphasis or Beas. Their country was very fertile and the inhabitants were agriculturists but brave in war.<sup>2</sup> Strabo refers to them as an autocracy of 5000 councillors, who used to present an elephant to the state.<sup>3</sup> Dr. Jayaswal suggests that this sturdy race was of the Yaudheyas whose presence in the force beyond the Beas was the immediate cause of alarm in the Alexander's army and its consequent retreat from that river in 326 B. C.<sup>4</sup>

In spite of all these, we can say little about the Yaudheyas and their locality with preciseness till c. 200 B. C. But onward we have their vast coinage covering about five to six hundred years and they are found extending over a vast area between the Sutlaj and the Jamna to tell their own story.

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1. Pāṇini, IV. 1. 173 ; V. 3. 114, 117.

2. Arrian, 5. 25 (Mc. Crindle : *Invasion of India by Alexander*, p. 121.).

3. Strabo, 15. 37 (Mc. Crindle : *Ancient India as described in Classical Literature*, p. 45.)

4. Jayaswal, *Hindu Polity*, p. 67.

The coins of this tribe are known in three distinct varieties, which are not only distinct in types but also are distinctly apart in time and belong to three different territories. But since their provenance are not very accurately recorded<sup>1</sup> and types are not distinguishably mentioned in the records of the finds, the last mentioned fact has not yet been realised. And on the basis of find-spots of the coins it is suggested that they were perhaps the largest republic that ever existed in ancient India.<sup>2</sup> The Yaudheyas occupied an area which may be roughly described as the eastern Punjab.<sup>3</sup> Their sway extended from Ludhiana to Saharanpur in one direction and from Saharanpur to Bahawalpur in another.<sup>4</sup> The cities of Lahore, Bahawalpur, Bikaner, Ludhiana and Delhi indicate the limits of their tribal territory.<sup>5</sup> Thus it seems to have comprised an area bounded on the west by a line drawn from Bahawalpur along the Sutlaj and the Beas upto Kangra ; on the north-east by a straight line drawn from Kangra to Saharanpur ; on the north by a line drawn from Saharanpur via Panipat and Sonpat to Bharatpur and on the south by a line drawn from Bahawalpur via Suratgarh, Sarsand, Bhatner to Bharatpur.<sup>6</sup>

We know that most of the tribal republics of the Punjab were migratory in character and migrated from one place to another from time to time when they had any outside pressure. Like the Śibis, the Mālavas and a few others, we shall presently see that the Yaudheyas too were a migratory tribe and they did not occupy the above defined territories at one and the same time.

The earliest coins of the Yaudheyas are ascribed to second and first century B. C.<sup>7</sup> On the obverse of these coins we have 'a bull standing to right facing *yūpa* (sacrificial post) within a railing.' Along the margin is the legend *Yaudheyānām Bahudhāñake* ; and on the reverse is an elephant facing right and below his feet is a long curved line (not serpentine) and above is a flowing penon or flag and *triratna* or *nandipada* symbol.

The legend of this coin type shows that the Yaudheyas lived in the Bahudhānyaka country. But the reading *Bahudhāñaka* was

1. B.M.C. Intro p. cli.

2. Altker, Yaudheya coins, (J.N.S.I, Vol XI, p. 50).

3. Allan, B.M.C. intro p. cli.

4. Altker, *ibid*, p. 50.

5. S. Majumdar, Notes on Cunningham's *Ancient Geography of India* p. 690.

6. R. C. Majumdar, *Corporate life in ancient India* (second edition), p. 269-70.

7. Allan, B.M.C. Intro, p. cxlix.

not certain for a long time. Rapson read it as such,<sup>1</sup> but scholars like Rodgers,<sup>2</sup> Vincent Smith,<sup>3</sup> Cunningham<sup>4</sup> and Allan<sup>5</sup> read it as *Krpudhanaba*, *Bhupudhanusha*, *Bhūmidhanusha*, *Kupradhañaba* respectively. It was only with the find of several thousand fragmentary moulds of this type of coins from Khokra Kot in Rohtak by Dr. Birbal Sahni, that Dr. Jayaswal confirmed the reading of Rapson.<sup>6</sup> The discovery of the coin-moulds not only made it clear that the legend was *Bahudhañaka* but also that the country was around Rohitaka.

And actually this is confirmed from the verses of the Mahābhārata, wherein is described the conquest of Nakula of the western quarter. It mentions that Nakula started from Khāṇḍavaprastha towards the west with a very big army and first of all attacked Rohitaka, which was dear to Kārttikeya and rich in cows and grain, and there a big battle was fought with the brave Matta-mayūrakas and he conquered the whole of the territories of Maru and Bahudhānyaka.<sup>7</sup>

These verses clearly show that Rohitaka (modern Rohtak) was the capital or headquarters of Bahudhānyaka and there lived the Yaudheyas. From the later coin-types of the Yaudheyas we know that Kārttikeya was their presiding deity and here we see that Rohitaka is said to be dear to him and the inhabitants are called *Matta-mayūrakas*.

We can conclude that the Yaudheyas in the second and first century B. C. occupied the Hariyana<sup>8</sup> portion of the Punjab comprising Rohtak, Hisar, Sirsa, Karnal and Gurgaon and the adjoining portion of the desert, the modern Marwar.

Some time in the first century B.C. the Yaudheyas migrated from the Bahudhānyaka country to the south-east when they felt the

1. Rapson, *J.R.A.S.* (1900), p. 107, note 1.

2. Rodgers, *Lahore Museum Catalogue*, Vol. I, part III, p. 136, note 2.

3. Vincent Smith, *C.I.M.*, part I, p. 181, note 1.

4. Cunningham, *A.S.R.* Vol. XIV, p. 141.

5. Allan, *B.M.C.* intro, p. cxlviii.

6. *J.B.O.R.S.* (1936), Vol XXII, p. 51-62.

7. ततो बहुधनं रम्यं गवाक्ष्यं धन धान्यवत् ।  
कार्तिकेयस्य दयितं रोहीतकमुपाद्रवत् ॥४॥  
तत्र युद्धं महच्चालीच्छुरैर्मत्तमयूरकैः ।  
मरुभूमि सकात्स्येन तथैव बहुधान्यकम् ॥५॥

Sabhaparvan, Ch. 32.

8. Hariyana is synonymous with Bahudhānyaka. This area is still rich in grains and cows of this area are considered to be one of the best breeds in the country.

pressure of the foreign invaders, most likely the Indo-Greeks in the Punjab, like other tribal republics. During this migration they occupied the north-eastern territory of Rajputana upto Bharatpur. This is borne out by the fragmentary inscription of some unknown *Mahārāja Mahāśenāpati* of the Yaudheyas, that was found at Vijaya-garh. This inscription is generally attributed to the 2nd-3rd century A. D.<sup>1</sup> But as Fleet has pointed out, the so-called Indo-Scythic form of *ma* of the inscription stamps it with an early date,<sup>2</sup> and it cannot be placed later than the last quarter of the first century or the beginning of the second century A. D.

The Yaudheyas had in this period the reputation of being the best heroes among the Kshatriyas, possibly because they had maintained their independence. But some time earlier than 150 A. D. they were overthrown by the Śaka Mahākshatrapa Rudradāman from Rajputana,<sup>3</sup> and having a crushing defeat they retired to the hill region in the Himalayas, as is evident from their second variety of coins. The poor state of the coins issued during the second century A. D. reflects this disaster.<sup>4</sup>

These coins have on the obverse the six-headed god Kārttikeya, standing facing, holding a spear in his upraised right hand and left hand resting on hip. The legend on the silver coin is *Bhagvato svāmīno Brahmanya Yaudheya*. And on copper *Bhagvato sv(sa)mīno Brahmanya devasya(sa) kumarasya(sa)*. The reverse has several variations, but the most familiar ones are (1) deer or stag to right and the symbols tree-in-railing with horizontal branches and vertical leaves and *nandipada* over six-arched hill with umbrella; (2) six-headed goddess Shashthi<sup>5</sup> standing on lotus, with right hand raised and left hand resting on hip, with the symbols as on var. 1.

These coins are closely connected in style and the type with the coinage of the Kuṇindas<sup>6</sup> and suggest that the Yaudheyas were either neighbours or they had occupied their territories. The provenance of the coins of the Kuṇindas shows that they occupied the hilly tract of the Sivalikas extending from the upper course of the Beas in the west to Garhwal in the east. We had a hoard of 136 coins of the Yaudheyas from the village Panjya in Jaunsar-Bawar of

1. Allan *B.M.C.*, intro. clii.

2. *C.I.I.*, Vol. III, p. 251.

3. *E. I.*, Vol. VIII, p. 44.

4. *B.M.C.*, intro. p. cliii.

5. For the identification of the goddess see *J.N.S.I.*, Vol. V., p. 29.

6. *B.M.C.* Intro. p. cxlix.

Dehradun district in 1936.<sup>1</sup> This hoard contained the coins exclusive of this type. On the evidence of a single hoard it is not possible to assign the whole territory of the Kuṇindas to the Yaudheyas, but it can well be surmised that they had occupied a considerable portion of the tract around Dehradun. Their coins, these too of copper, could not have found their way in that remote corner of the hill tracts, unless it was occupied by the Yaudheyas.

That the Yaudheyas in the third century A.D. moved to the west and occupied the territory between the upper courses of the Sutlaj and the Beas, is borne out by their coins of the third type, that are assigned to the third and fourth century A. D. These coins have on the obverse Kārttikeya facing holding a spear in right hand and left hand resting on hip, and peacock to left at his left foot. The legend around is *Yaudheya gaṇasya jaya*. On the reverse is the goddess Shashṭhi walking to left with right hand upraised and left hand on hip.

Just like the moulds of the coins found at Rohtak, we have the moulds of this type of coins from the site of Sunet, three miles west of Ludhiana town. Three moulds from this site were in the collection of Mr. Carr Stephens of Ludhiana, who had sent them in 1884 to Dr. A. F. R. Hornle; he had described them in detail,<sup>2</sup> but mistook them for seals.<sup>3</sup> 41 moulds from this site are in the Indian Museum, which were received by it in 1934 from the Lahore Museum. Some of them were purchased at Sunet in 1917 by the late Sri Dayaram Sahni and others were purchased by Sir John Marshall. A further series of 38 moulds are in the Bhārat Kalā Bhavan, Banaras Hindu University. These moulds were purchased by Śrī Jayachandra Vidyālakṛa from the village people at Sunet in 1938 and by Śrī Amritapala in 1940.<sup>4</sup>

Sunet is of a great antiquity, since it is mentioned in the Gaṇapāṭha of Pāṇini as Sunetra. Sunetra is referred to in the Mahābhārata as one of the three sons of Dhṛitarāshṭra, the son of Janamejaya in the Kuru dynastic list. Dr. V. S. Agrawala suggests that this prince may have been remembered as the eponymous founder of the place which bore his name after him.<sup>5</sup> Any how the fact that since the original discovery of the moulds in 1884, such a considerable number of moulds of the same time has come to light at

1. *J.N.S.I.*, Vol. II, p. 109.

2. *Proc. A. S. B.* (1884) Vol. LIII, p. 138-139.

3. Birbal Sahni, *Technique of the casting of coins in Ancient India*, p. 33.

4. *Ibid.*, p. 33-34.

5. *J.N.S.I.*, Vol. IV, p. 48.



long intervals from the same site indicates the existence of a mint there ; and also, that it was an important centre of the Yaudheyas and that the Yaudheyas lived round about this area in the third and fourth century A. D.

Thus it is clear that the Yaudheyas never occupied at one and the same time the vast territories that had so far been attributed to them. They had like other tribal republics small territories at different places in different periods.

In the light of these facts if we examine the suggestion that the Yaudheyas gave the first blow to the Kushāṇa empire in the beginning of the third century A.D.,<sup>1</sup> it would be clear that it can no more be tenable ; since it was based on a belief in the extensive territories of the Yaudheyas. In the period when the fall of the Kushāṇas is suggested, we find that the Yaudheyas had retired to the hills being pressed adversely at the hands of the Śakas. Under no circumstances they could have taken up arms against the Kushāṇas of Mathurā. The coins with the legend *Yaudheya-gaṇasya jayaḥ* and the seal *Yaudheyānām jaya mantradharāṇām* were issued when they had retreated further west in the Kangra valley. These do not suggest any Yaudheyan victory over the Kushāṇas ; but if they do, it would have been only when the Kushāṇas were receding from the Punjab to the north-west.

Towards the end of fourth century we find the Yaudheyas as a border tribe of the Gupta empire in the time of Samudragupta. We can very well see that during this period the Yaudheyas were in the Kangra valley surrounding Ludhiana above the courses of the Sutlaj and Beas and the Gupta empire in this period stretched up to the place.

1. Altoker : *A New History of the Indian People*, Vol. VI, p. 28.

# INSCRIPTIONS FROM SITABHINJI, ORISSA.

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*Reprint from*

THE JOURNAL OF THE ANDHRA  
HISTORICAL RESEARCH SOCIETY. (Vol. 19.)

Rajahmundry  
INDIA.  
1951.



## Inscriptions from Sitabhinji, Keonjhar District, Orissa.

By Sri T.N. Ramachandran, M.A.

The recent discovery in the village of Sitābhīñji, Keonjhar District, Orissa, of an interesting *tempera*-painting on a rock-shelter called Rāvaṇachhāyā in the shape of a half-open sun-shade formed by two huge boulders placed one over the other, has indeed been of sensational importance. The subject-matter of the painting is a procession relating to a king on elephant who is preceded by footmen, a horseman, and a dancing woman and followed by an attendant woman. A painted inscription below the King gives the name of the king as "Mahārāja Śrī Disā Bhañja". The painted inscription is in characters of about the 4th century A. D., and this date is corroborated by an *ensemble* of evidence furnished by other associative antiquities recovered in the vicinity of Rāvaṇachhāyā such as brick remains, inscribed boulders mostly with names of Śaiva ascetics, a stone carving of a Mukhalinga recalling Gupta models, a female figurine of soap-stone of the third-fourth century A. D., bronze ear-ornaments (kuṇḍalas) and copper cast "Pūri-Kushān or Oriya Kushān" coins of the 4th century A.D. An article on this *tempera* painting by the writer with suitable colour reproductions has just been published in the ARTIBUS ASIAE No. XIV, 1/2, Switzerland. The coins are being dealt with by the writer in a separate article now under publication in Vol. XIII, part I of the Journal of the Numismatic Society of India. The inscriptions occurring on the Rock-shelter and inscribed boulders are being discussed here.

An area  $3/4$  mile  $\times$   $1/8$  mile, bounded, on the east by a number of inscribed boulders (pl. I, sketch-6), on the south-east by a massive rock called "Śurpanakhā" with a Mukha-linga in front of it (pl. I, 5), on the south by a river called Sitā, the bed of which yielded some prehistoric implements (pl. I-12), on the west by two detached semi-spiroidal boulders called Tava and Kuśa (pl. I-1), on the north by a conical massive rock called "Sitābhāṇḍārgar" (pl. I-3) and with the painted rock-shelter Rāvaṇachhāyā (pl. I-4) located in its centre, is not only important as recalling Sitā's exile as narrated in the Uttarakaṇḍa of Rāmāyaṇa but also as the site that yielded a variety of antiquities including the inscribed boulders that are being described in this article.

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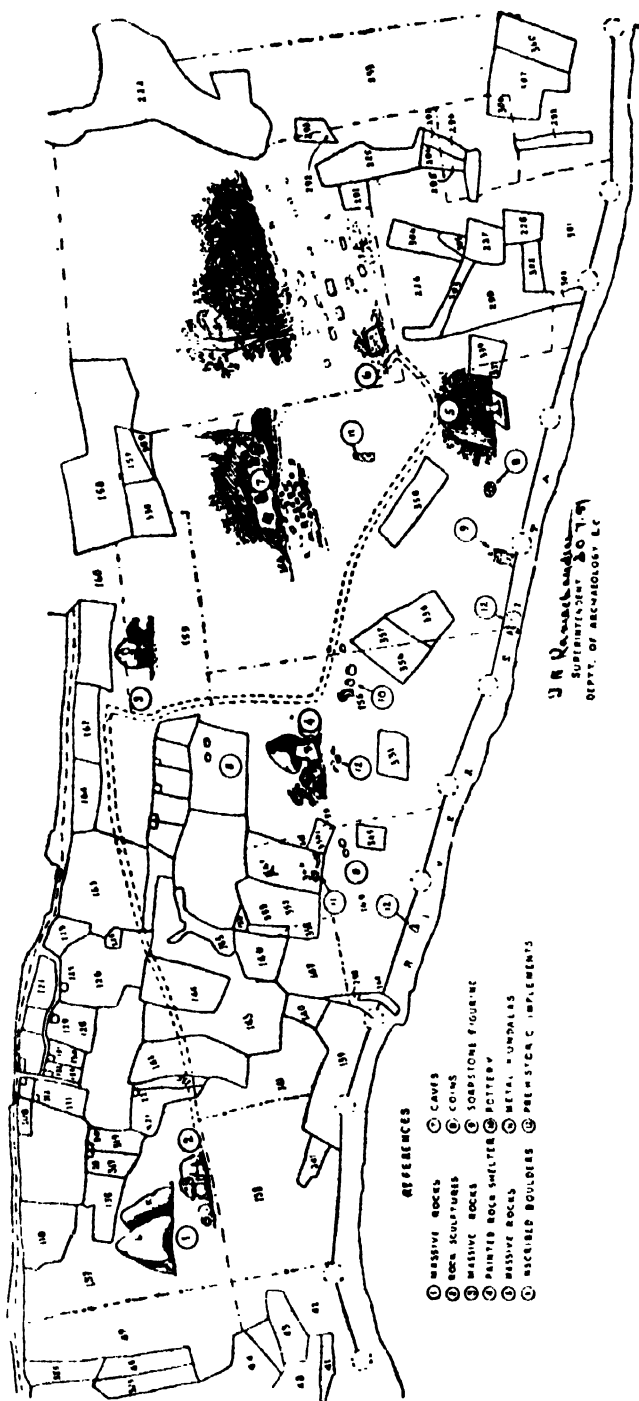
First in importance comes the painted inscription. That the subject-matter of the painting is a royal procession is what the inscription announces by its location below the King on elephant. It reads as (pl. II) :-

Mahārāja Śrī Diśā Bhañja, "The Mahārāja (who bore the) illustrious (name) Diśā Bhañja". One letter of second line below the letter hā and three letters below the horse too faded and fragmentary to be made out, are also visible below the first line. The procession seems to relate to Mahārāja Śrī Diśā Bhañja who is on elephant-back preceded by four footmen, a cavalier on horse back and followed by an attendant woman. There is an attendant seated behind the king on the elephant holding a chāmara in his right hand and a chhatra in his left hand, as in the sixth century painting of Bagh.<sup>1</sup> The female attendant's pose recalls the style of Ajanta<sup>2</sup>. The inscription recording the name of the king is written in characters of about the 4th century A.D. and resembles the characters occurring in the Susunia rock inscription of Chandravarman<sup>3</sup>. The language is Sanskrit and the characters belong to the eastern variety of the Northern alphabet of the 4th century A.D. We do not get such an early Diśā Bhañja in the Bhañja dynasties of Orissa. There are three groups of Bhañja Kings known to us so far. The first group is the Khinjali-maṇḍala branch. The second group ruled over Keonjhar and Mayurbhañj and the third group over North Orissa. We hear of two Dig-Bhañjas, one the brother of Netri (Neṭṭa) Bhañja II of the Khinjali-Maṇḍala branch, and another Dig Bhañja who was the son of Koṭṭa-Bhañja of the Khijjiga-koṭṭa branch. But these two Dig-Bhañjas are not earlier than the 8th or 9th century A.D. It is doubtful to identify Khinjali-Maṇḍala with Keonjhar. Khinjali was certainly part of the high-lands of Orissa.

A little to the east of Rāvaṇachhāyā are the remains of cut boulders half buried in earth, some of which contain short inscriptions with their letters ornamentally treated as in inscriptions of the Parivrajaka Hastin<sup>4</sup> (482-3 A.D.). The language is Sam-

1. V. Smith, History of Fine Art in India and Ceylon, 1930, Frontispiece.

2. Ibid. plate 56-c. 3. E.I. Vol. XIII, p. 133. 4. Fleet, C.I.I., plates xiii-xv.



Pl. I. Sketch: Sitābhīnī and its archaeological vestiges.



skrit and paleographically, they are later than the Rāvanachhāyā inscription. If the Rāvanachhāyā inscription belongs to the 4th century A.D. these inscriptions can be assigned to the 6th century A.D. Vowel formations and down strokes are in long ornamental flourishes as in the inscriptions of Nāgārjunakonḍa<sup>5</sup>. Strangely however, these inscriptions engraved on boulders are in a South Indian lipi, while the painted inscription on Rāvanachhāyā is of the eastern variety of the Northern alphabet like the inscription of Chandravarman on the Susunia rock, Bengal<sup>6</sup>. A satisfactory reading of the letters in these later inscriptions is obtained by a comparison with the Telugu-Kannada-lipi, as for example the Chalukya-Kannada-lipi and the Vengi-lipi of the early 6th century A.D.

How are we to account for the occurrence of this exotic script in North Orissa? As the answer appears to be supplied by some of the inscriptions themselves ( - three of them), we can do no better than discuss the inscriptions themselves.

The inscriptions occur on independent and scattered boulders half-buried in earth. Nearby to their south, was found a Mukha-linga (plate I-5), of soap-stone, with four faces of Śiva recalling Gupta models. The find of the Mukhalinga is helpful to determine that we are on the ruins of a shrine sacred to Śiva and that the records are presumably of Śiva ascetics (munis) and followers of Śaivism. The inscriptions read as follows (plates III-VIII) :-

1.	A	Plate III
2.	Ya chhchha ya rak [sha] .	
3.	Vaṁ (Gaṁ) ga pa ra ma (mā) dhi sa	Plate IV
4.	Śa śa lām chhchha na dha ra pa [da]	
5.	Pu raṁ ya (ja) ya Gaṁ ga pu ra	Plate V
6.	h <sup>h</sup> ya (ja) ya dra tha	
7.	Śa (śa) Si (si) tha (dha) ra pa da	
8.	Gu (Ga) m [ga] va (vā) di Gaṁ gu (ga)	Plate VI
9.	Sa (śa) Sa (śa) tha (dha) ra vaṁ sa (śa)	

5. Journal of Oriental Research. Vol. XVI, part II, p 91-2.

6. Ep. Ind. Vol. XIII, p. 133.



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- |   |             |
|---|-------------|
| 10. Sa (śa) Si (śi) tha (dha) ra pa da sa (sya) | [ Plate VII |
| 11. Yu ga pa m̐ cha chakra                      |             |
| 12. Vi sa ya sa ya yām s̐u [bu] [ja]            |             |
| 13. Ni dhi ni kshe pa dha ra                    | Plate VIII  |
| 14. Śa Si [Śi] tha [dha] ra sya                 |             |

Five of the inscriptions [Nos. 4, 7, 9, 10 and 14] that relate to Śaiva pilgrims or followers of Śiva or Siva himself are –

1. Śa sa lām chh chhana dhara pa [da] [plate IV. No. 4]  
= [He whose] abode is the bearer of the moon of the hare mark [Śiva].
2. Sa si tha ra pa da [pl. V. No. 7]. = Śa s̐i dha ra pa da  
= [He whose] abode is the bearer of Chandra [Śiva]
3. Sa sa tha ra vaṁ sa [pl. VI. No. 9] = Śa sa dha ra vaṁ sa  
= [He of the] lineage of the moon [Chandra] who bears the hare.
4. Sa si tha ra pa da sa [pl. VII, No. 10]  
= Śa s̐i dha ra pa da sya  
= Of him [whose] abode is the moon-bearer [Śiva]
5. Śa si tha ra sya [pl. VIII. No. 14]  
= Śa s̐i dha ra sya  
= Of the Moon-bearer [Śiva].

On one inscribed boulder, the single letter A was found [pl. III-1] which like the tiny grass showing which way the wind was blowing helped to determine the parent source or province from which the lipi came, viz, Telugu-Kannada from Chalukya or Vengi. Though it is tempting to read the letter as O and see in it the abridged form of Om, the two horizontal strokes on the top are the normal feature of almost all letters of this stock; and hence the letter is just A.

The five śaivite records discussed above [Nos. 4, 7, 9, 10 and 14] acquaint us with the fact that Śaivism in which yoga perhaps played a great part, was the faith current in the locality. The sect was no doubt the Pāśupata, a faith which was also current in Bengal. Śiva Śrīkaṇṭha first preached this doctrine and was followed by Lakuliṣa and these two were responsible for sowing the seeds of the Pāśupata religion. Lakuliṣa had four ascetic disciples, Kusika, Garga, Mitra and Kaurushya. Lakulīśa,

according to the Vāyu and Linga Purāṇas is the last incarnation of Śiva. He is assigned a date of contemporaneity with Patanjali of the Mahābhāṣya [2nd century B. C.] and by some writers a later date<sup>7</sup>, such as first or second century A. D. If Patanjali and Lakulīśa were contemporaries, Patanjali's reference for the first time to the "Śiva-Bhāgavatas" in his Mahābhāṣya, and the curious circumstance that Patanjali is looked upon by the worshippers of Śiva in Indonesia along with the four disciples of Lakulīśa as five Devatās<sup>8</sup>, give importance to the Kalinga tradition relating to the original migration of faiths and colonisation from the Kalinga coast to Indonesia. The Paśupata was the oldest form of Śaivism prevalent in North India in the early centuries and Orissa was no exception. In the earlier temples of Orissa such as Parasurāmesvara [7th century A. D.] in Bhuvanesvar and Mahādeva in Borogam, Ganjam district, we find images of Lakulīśa. In Orissan sculptures of the 6th, 7th and 8th centuries A. D., he appears either alone or with two or four of his disciples seated on separate lotuses rising from a common lotus which also forms the *āsana* of Lakulīśa. Though at first sight he may be mistaken for the Buddha, the lakṣa or club and penis erectum [urdhva meḍhra] distinguish him. The Śaiva faith at Sitābhīṅgi was no doubt Lakulīśa's Paśupatism.

We should now determine who the person or persons were at Sitābhīṅgi that followed his faith and have left for us indelible records in the shape of a Mukhalinga and inscribed boulders. The answer to this is also found in some of the inscriptions on the boulders. Such are Nos. 3 [pl. IV], 5 [pl. V], 8 [pl. VI] and 9 [pl. VI]. They read as :-

1. Vam̐ [Gaṁ] ga pa ra ma {mā} dhi sa [pl. IV].

≡ Vam̐ ga pa ra mādhiśa

≡ The great adhīśa of Vam̐ga [Bengal]

Or

≡ Gaṁgaparamādhiśa

≡ The great adhīśa [of] Gaṁga {varīśa}

2. Puraṁ'ya ya Gaṁ ga pu ra [pl. V]

≡ Puraṁjaya Gaṁ ga pu ra

7. E. I. Vol. XXI, 1.

8. Kern, *Verspreide Geschriften*, VI, 308.

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==Gaṅgapura or the city of the Gaṅga,  
the conqueror of cities.

3. Guṁ va ḍi Gaṁ gu (pl. VI)

==Gaṁ (ga) vā ḍi Gaṁ ga

==Gaṁga [of or from or belonging to] Gaṅgavāḍi

= The Gaṁga [King or Line of kings] of Gaṅgavāḍi (i.e.)  
that came from the Gangetic valley called Gaṅgavāḍi.

4. Śa sa dha ra vaṁsa (pl. VI)

= [Of the] Lineage of Chandra, who bears the hare.

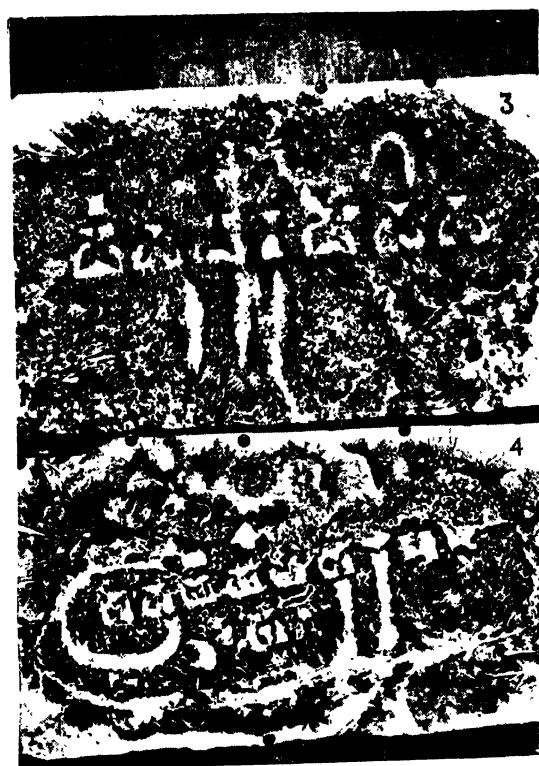
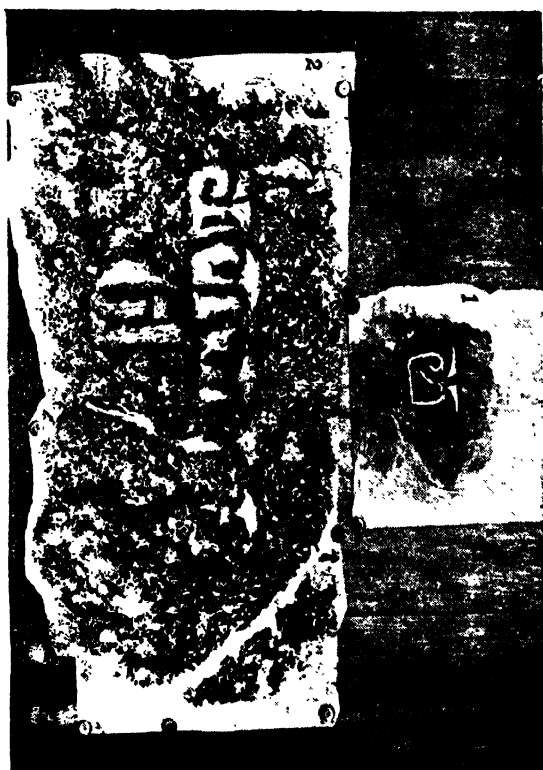
These four inscriptions collectively appear to take us to an early phase of Orissan history, when a Line of kings, the Gaṅga, of Chandra-vaṁśa<sup>9</sup>, Śaivite in faith, came to Kalinga at the end of the 5th century A. D. from their home in the Gangetic valley called Gaṅgavāḍi. Inscription No. 8 [pl. VI] appears to refer to the Ganga hailing from Gaṅgavadi. Inscription No. 5 [pl. V] refers to the city of the Ganga [perhaps Capital] which he doubtless founded after conquering (and destroying) cities of his foes. And inscription No. 3 (pl. IV) advances us a step further into the realisation that this Ganga was an Adhisa or Adhirāja. Thus we are face to face at Sitabhinji with some thing that seems to relate to the Eastern Gangas of Kalinga (497-625 A. D.) whose origin as we know is no longer in obscurity<sup>10</sup>. While the name of the founder of this dynasty is not preserved, we have records of Mitavarma and his son Adhirāja called Indrādhirāja or Indravarma I who ruled between 515-530 A. D. and whose capital was Dantapura<sup>11</sup>. This Adhirāja Indra, according to the Godāvari grant "first acquired great and pure fame, by overthrowing the infuriated elephant Kumuda that came against the elephant Supratika in the tumultuous combat waged by all the kings--in the desire to uproot by force Indrabhaṭṭāraka<sup>12</sup>. Māha-Sāmanṭa varma (560-565 A. D.) with his capital at Saunyanagara, Rājasiṁha Hastivarma (570-580 A. D.) with Kailāṅganagara (present Mukhalingam or Kalinga-Nagara) as his capital, Indravarma II

9. E. I. XIX, p. 135. Text of plate, II. 2-3. 10. J. A. H. R. S., Vol. V. Pt. 4, pp. 261-265. 11. I bid. Prof. R. Subba Rao's articles on the Origin & Capital and History of E. Gangas of Kalinga in Vols. V & VI. 12. I bid. VI. Pt. 2, pp. 71-73.



Pl. II. Sitābhīṇī: Rāvaṇachhāyā-  
Inscription recording the name of Mañārāja Śrī Diśa Bhāṇja.

Pl. III. Boulders with inscriptions Nos. 1 and 2.



Pl. IV. Boulders with inscriptions Nos. 3 and 4.

(580-595 A. D.) also with Kalinganagara as his capital and Dānārṇava and Indravarma III (620-655 A. D.) are the names of the other kings of this Early Eastern Ganga Dynasty of Kalinga known to history.

While one line of the Ganga Kings moved from the Gangetic valley (Gangavādi) to Mysore and founded there a Gangavādi and a dynasty called the Western Ganga dynasty and adopted Jainism, another line came to Mahendragiri in Srikakulam district and worshipping Śiva (as Gokarna Svāmi) ruled over entire Kalinga. According to Prof. R. Subba Rao, the Gangaridai of Megasthenes (300 B.C.) are the Ganga tribes that according to Pliny (77 A.D.) would seem to have moved southwards and occupied the region of *Modo-Galingae* (*Madhya-Kalinga*?) near about the mouths of the R. Vamsadhara in Kalinga.<sup>13</sup> Their capital is said to be Dandagula, identified with the Dantapura of Buddhist traditions.<sup>14</sup> In the Eastern Ganga genealogy Śaśānka (moon) occurs after Atri as Atri's son and the Ganga Vamsa is thus a lunar race. Their early capitals were Kalinganagara and Dantapura. There were two Dynasties of these Gangas, an early one and a later one, but both worshipped Śiva and both were related to the Eastern Kadambas. This Vamsa was indeed an illustrious one as it had continuous sway over Kalinga for nearly 1000 years. Though at the beginning it ruled over a small territory (Ganjam, Visagapatnam and Godavari districts), later on from the time of the later E. Ganga Vajrahasta (1037-68 A.D.) the Ganga empire extended to Vengi in the South and Odra in the north and west.<sup>15</sup> Thus we have at Sitabhinji records referring presumably to these illustrious early Gangas, their capital (Gangapura), their original home (Gangavādi) and to their great Adhīṣa who in all probability was Mitavarma's son Indra Adhīrāja or Indravarma I who ruled between 515-539 A.D. and whose pura or capital city was Dantapura, identified as Dantavarapukoṭa<sup>16</sup> [near Chicacole Road Railway Station, B.N.Rly.]

Inscriptions Nos. 2, 6, 11, 12 and 13 now remain to be dis-

13. According to other writers, *Modo-Mūdu* (Telugu) stands for "three" and the term refers to "Triakalinga". 14. *E.I.* Vol. XIX p. 135. 15. *J.A.H.R.S.* Vol. V. p. 262 ff. 16. Prof. R. Subba Rao's *Jirjingi C.P. Grant of Indravarma* in *J.A.H.R.S.* Vol. III, Pt. I pp. 49-53.

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-cussed. Inscriptions Nos.6 (pl. V), and 11 (pl.VII) appear to relate to the valour or prowess of some one seemingly the Gaṅga. No.6 is-

„ h ya ya dra tha h (pl. V)

≡ h Ja ya dra thah

≡ One whose chariot marches or moves victoriously (in all directions). With this form we may compare Dasaratha, whose chariot moved unchallenged and victoriously in ten directions (8 cardinal and sub-cardinals, one above and one below). The person Jayadratha referred to here was perhaps of such valour.

Inscription No. 11 (pl. VII) which reads as - Yuga pañ cha chakra- is puzzling- It can be viewed in three ways -

1. Yuga + pañcha chakra
2. Yuga + pañcha + chakra
3. Yuga pañcha + chakra

Let us examine the first alternative - yuga + pañcha chakra-

On the analogy of words serving as names like Pañcha-chakshus standing for the Buddha, Pañchabā a standing for Manmatha, Pañchabāhu for Śiva's attendant, Pañchabhujā for Gaṇeśa, Pañchānana for Śiva and lion, Pañchavaktra for Śiva, Pañchadhanus for a prince (Vāyu Purāṇa) and Pañcha-chandra for a person (Rājatarāṅgini), we may take Pañcha chakra as the name of some illustrious person or god of yore, and apply it to some one now and call that one a living Pañcha chakra or the "Pañcha chakra of this life or generation [Yuga]". Though I made careful inquiries, the term "Pañcha chakra" does not appear to have any such significance or usage [prayoga]; hence this alternative has to be abandoned.

Thinking that Pañcha-chakra is perhaps an esoteric or religious or ritualistic term like pañchāyatana, pañcha-giṇḍa, pañcha-brahmāsana, pañcha-mudrā, pañcha-makāra, pañchājā-maṇḍala, pañchāmṛta, pañcha-yajña, pañchasavana, pañchakośa, pañchakrama, pañchāgni, pañchakalpa, pañchakarmī, pañchakapāla, pañchakarna, pañcha-gavya, pañchārtha, pañchatatva etc., I sought its interpretation from some local scholars of Yoga. Esoteric circles, Professors of philosophy, Scholars and Pandits. But no solution has yet been forthcoming. As in pañchājā-maṇḍala does pañcha-chakra mean five circular āsanās, four for



Pl. V. Boulders with inscriptions Nos. 5,6 and 7.



Pl. VI. Boulders with inscriptions Nos. 8 and 9.





Pl. VII. Boulders with inscriptions Nos. 10, 11 and 12



Pl. VII. Boulders with inscriptions Nos. 13 and 14.

Lakuliṣa's disciples and the fifth [central one] for Lakuliṣa? If it is so, then is it an esoteric form of dhyāna or worship that is offered in Pāśupatism to Lakuliṣa and his four disciples?

The second interpretation is "Yuga + pañcha + chakra" meaning "2 or 4 or 12 + 5 + chakra or wheel". This may give a sense like "2 or 4 or 12 + 5 wheels" or one whose (chariot) wheels are 7 or 9 or 17. This is obviously a confusing result and has also to be abandoned.

The third alternative is "Yuga pañcha + chakra". The term "chakra", when associated with valour such as that of a conquering monarch (Chakravarti or Sārvabhauma) has the significant meaning "the wheel of a monarch's chariot rolling over his domain". We have the satisfactory example of Daśaratha, whose chariot wheel rolled triumphantly over the ten directions ("Daśāsu dikṣhu apratihataḥ rathah). The occurrence of the term "Jayadrathah" (pl. V-6) on another boulder at Sitābhīñjī and discussed above, is very significant. It seems to me that the term 'Chakra' in this record has the same import and significance as the term Jayadratha or Daśaratha, standing for the unchallenged course of the king's chariot or march of valour. Here, *Yuga pañcha* may be taken to stand for 'twice five' which means 'ten' and 'chakra' for the wheel of the triumphant monarch's chariot. Thus, we get the idea that the person's (let us call him the Gaṇḍa Adhiṣṭa) chariot wheel moved, the Jayadratha that he was, in the ten directions unchallenged and unhampered even as the wheel of Daśaratha rolled over his domain in 'Trētāyuga'.

Three more inscriptions from Sitābhīñjī remain to be accounted for, Nos. 2 (pl. III), 12 (pl. VII) and 13 (pl. VIII). No. 2 which is only a fragment reads as - Ya chhchha ya ra k [sha]. The records of Sitābhīñjī without an exception, contain mistakes and misplaced vowel strokes. Thus, 'Sa' for 'S'a' and 'S'i', 'va' for 'Ga', 'ma' for 'mā', 'dhi' for 'dhi', 'ya' for 'ja', 'tha' for 'dha', 'Gu' for 'Ga', 'Sa' for 'Sya' and actual omission of letter 'Ga' in one case (No. 8) are some instances in proof. The present record has therefore to be corrected as 'Ya ksha ya'ra ksha' in

17. Monier Williams, p. 380-381; Yājñavalkya, i, 265; Mahābhārata, i XIII; Bhāgavata Purāṇa. IX, 20,32; Vāyu Purāṇa.

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the first instance, and on the analogy of terms of protection common to inscriptions such as 'Māheśvara rakshā' and 'paṇ-māheśvararakshai', still further corrected as 'Yakshebhyo raksha' to give the meaning (and the prayer) 'protect (me or us) from ghosts and evil spirits'.

No. 12 (pl. VII) is a record of highly ornamental flourishes, and calligraphic effect. It has three flourishes, one of which resembling an elephant's raised trunk, has no relation to the letters above which it is found. Though the record is clearly engraved, it cannot be satisfactorily read. My tentative reading is -

Vi sa ya sa ya yaṁ su(bu) ja

Admitting that here we have mistakes and the need to correct, I am correcting it as 'Vi sa yā śayāmbuja'. In other words it can be split as 'Viśaya + āśaya + āmbuja'. This splitting gives us an interesting result, such as one can expect in a place sacred to Śiva where ascetics met and conducted their theological pursuits. The terms are not used here in their general and popular sense. 'Viśaya' in theological terminology and according to Jaimini and Śaṅkara-Vijaya, means doubt or uncertainty. By this the philosopher's 'doubt' is expressed, which leads the enterprising student to the next stage of 'jijñāsā'. 'Āśaya' means asylum, store, or abode. And 'Āmbuja' which normally means 'lotus' or anything aquatic has here a special meaning such as 'Indra's thunderbolt', which lexicographers<sup>18</sup> have mentioned in their lexicons, though it has not yet been noticed in any published text or usage (prayoga). Accepting this special meaning as the one probably intended we can analyse the record as-

Viśaya (=doubt) + āśaya (=store-house) + āmbuja  
(=thunderbolt) = Viśayāśayāmbuja.

And this gives us the happy and edifying result that the record refers to some great and illustrious person - let us call him an Āchārya - who is a 'thunderbolt' to the collection of doubts'. With his knowledge and upadeśa (=thunderbolt), he destroys as it were all the doubts of the śishyas and aids them to secure true knowledge (niśchayātmika-jñāna). This in short would appear to be the spirit of this important record which has legitimately

18. Purushottamadeva's Trikāṇḍaśa. Monier Williams, p. 83.

received decorative and calligraphic flourishes at the hands of its engraver. "Viṣa yā śa yāmbuja" may be another reading (after correction) which may represent the person referred to as a philosopher or yogin or āchārya detached from worldly pursuits, like the lotus from its aquatic surroundings and base. This recalls to our mind the philosopher's ideal 'puruṣas = tupuṣkarapālāśavan = nirlepah kiṁtu cetanah'. Does not the lotus (in bud or bloom) suggest by its erect position above water level, that though sprung from it and actually on it, it knows that it is not related to water or that it has nothing to do with it? Such is the position of the soul in relation to matter. Viṣayāśaya (≈store of mundane activities), stands here for matter, and the detached lotus (ambuja) for the soul.

• Inscription No. 13 (pl. VIII) reads as 'Ni dhi nikshe pa dha ra' ≈ Ni dhi (≈treasures); Nikshepa (=deposits)dha ra (=preserver or possessor of) and seems to relate to a high functionary who possesses or preserves treasures and deposits. Either it refers to a treasurer such as the King of the land could have or a spiritual Head or religious Pontiff (a maṭhādhīpati) would need. In the latter case, the treasurer alluded to, no doubt attended to the accounts of the religious seat (a Shrine or a Maṭha), such as SitābhiŪji had the good fortune to be in the 6th century A. D., thanks to the patronage and proselytising zeal of the victorious early kings of the Eastern Ganga Dynasty of Kalinga, who were not only conquerors but also ardent devotees of Śaśidhara (Śiva)

Inscriptions Nos. 3 (pl. IV), 4 (pl. IV), 6 (pl. V), 7 (pl. V), 10 (pl. VII) and 14 (pl. VIII) do not rule out the possibility of the Gauda king Mahārājādhīrāja Śaśāṅka as being the king to whose sway and religion they probably relate. For we know from Ganjam plates dated 619 A. D. of Mahāsāmanta Mādhavarāja II of the Śailodbhava Dynasty ruling over Koṅgoda that Mahārājādhīrāja Śaśāṅka was his suzerain, and that Śaśāṅka's kingdom, included some time before 619 A. D., Odra and Koṅgoda in Orissa by conquest<sup>19</sup>. Śaśāṅka became the king of Gauda some time before 606 A. D. with his capital at Karnaśuvarṇa (modern Rāṅgāmāti in Murshidabad district). His parentage is still in obscurity and attempts to connect him with the Guptas have been disputed<sup>20</sup>.

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From the Rohtasgarh seal matrix record, we get the name Śrīmahāsāmanta Śasānka'. If he is the Gauda Śasānka, then it means that Śasānka started as a subordinate ruler under perhaps, as Mr. R. D. Majumdar stated, Mahāsēnagupta. Another school maintains that Śasānka's overlord was the Maukhari king. Be it as it may, Śasānka of humble origin developed sometime before 606 A. D. into a great conquerer and by 612 A. D. included in his kingdom Gauda, Magadha, Utkala and Kongoda<sup>21</sup>. Of special interest to us is that he was a staunch Śaiva. His coins show the figures of Śiva and Lakshmi. His anti-Buddhist zeal did not find favour with Yuan Chwang who has recorded stories of Śasānka's persecution of Buddhism and his ignoble death. The poet Bāṇa condemns Śasānka for his religious bigotry as Gaudabhujāṅga and Gaudādharma. But such charges must be accepted only with reserve.

The above details tend to suggest the advent of the Gauda Śasānka at Śitābhīṇjī. Both the Eastern Gangas of Kalinga and Śasānka were ardent Śaivites. Both were conquerors. In fact, inscription No. 3 (pl. IV) which reads without correction as 'Vam ga para mā dhisa' may well be translated as 'the great Adhisa of Vamga (Bengal)' and may apply to Mahārājādhirāja Śasānka. The other inscriptions (Nos. 4, 6, 7, 10 and 14) may be explained as standing for his valour and devotion to Śiva. Against this theory relating to Śasānka stand however the following features of the Śitābhīṇjī records:—

1. The South Indian Lipi or the Telugu-Kannada Lipi of the records.
2. Their date on palaeographical grounds, viz, early 6th century A. D.
3. The occurrence of names, Gangapura (No. 5), Ganga and Gam [ga] vādi (No. 8).
4. The reference in inscription No. 9 of the 'Sasi dha ra vaṁsa' or the lunar race to which, as we know, the Eastern Gangas belonged.
5. And lastly the fact that the Eastern Gangas of Kalinga (497-625 A. D.) were early settlers in Orissa, earlier than Śasānka's conquest by at least a century, were like Śasānka worshippers of Śiva and mighty conquerors but unlike Śasānka belonged to the Lunar race (inscription No. 9) and founded perhaps towns and named them Gangapura after the name of their own dynasty [Nos 5 and 8]. Also there is an Adhisa [inscription 3] in the Ganga Line, Indra Adhirāja [515-539 A. D.] to whose adventurous spirit we have already alluded.

21. I bid, p. 65.













